

23. ASSESSMENT OF EFFECTS ON ABORIGINAL RIGHTS AND RELATED INTERESTS

23.1 INTRODUCTION

This chapter assesses the potential adverse effects on asserted or established Aboriginal rights and interests which may arise from the Project during the Construction, Operations (I and II), Closure, and Post-Closure phases. The assessment identifies measures to mitigate or accommodate potential effects. Aboriginal groups considered in the assessment include the Simpcw First Nation (SFN), Adams Lake Indian Band (ALIB), Neskonalith Indian Band (NIB), Little Shuswap Indian Band (LSIB), and the Métis. The assessment in the chapter has been informed by the Simpcw First Nation Traditional Land Use and Ecological Knowledge Study (TLU & EKS; [Appendix 22-A](#)), as well as the SFN Preliminary Research Report in Support of the Simpcw Strength of Claim ([Appendix 23-A](#)).

The chapter also provides a summary of consultations undertaken by YMI with Aboriginal groups during the pre-Application stage. Issues identified by Aboriginal groups during consultations and YMI's responses to the issues are identified in [Appendix 3-F](#). The socio-economic settings for the SFN, ALIB, NIB, and LSIB are described in Section 23.5 and a summary socio-economic overview report and socio-economic baseline reports for each First Nation are appended in [Appendix 23-B](#).

In the *Haida* (2004), *Taku River* (2004), and *Mikisew Cree* (2005) decisions, the Supreme Court of Canada (SCC) held that the Crown has a duty to consult and, where appropriate, accommodate when the Crown contemplates conduct that might adversely impact potential or established Aboriginal or Treaty rights. This duty has been applied to an array of Crown actions (and decisions) and in relation to a variety of potential (asserted) or established Aboriginal or Treaty rights (AANDC 2011). Procedural aspects of the duty to consult can be delegated from the Crown to another party. The provincial Crown has formally delegated procedural aspects of consultation with First Nations to Yellowhead Mining Inc. (YMI) through the section 11 and section 13 Orders. First Nations consultation has been conducted by YMI on behalf of Harper Creek Mining Corporation (HCMC), a wholly owned subsidiary of the YMI.

The EAO guidance document *Proponent Guide for providing First Nation Consultation Information – Non-treaty First Nations* (BC EAO 2010) has been used to inform the preparation of this chapter.

23.1.1 Background on Aboriginal Rights

Aboriginal rights refer to practices, traditions, and customs that were practiced prior to European contact and are held communally. Examples of rights include the right to fish, hunt, and trap on traditional lands, including the right to subsist on these resources, and may include cultural practices (*R. vs. Van der Peet* (1996)). Aboriginal rights are grounded in the recognition of the long-term use and occupancy of the land by Aboriginal peoples who were resident in Canada prior to European arrival and flow to descendants on this basis. Canada has recognized and affirmed Aboriginal rights under section 35(1) of the *Constitution Act* (1982).

The test for Aboriginal rights was set out by the SCC in *R. v. Van der Peet* (1996). In order to be an Aboriginal right an activity must be “an element of a practice, custom or tradition integral to the distinctive culture” of the Aboriginal group claiming the right. Further, the practice, custom or tradition must have existed prior to contact with Europeans. Claims to Aboriginal rights must be characterized in context, on a specific rather than a general basis and must be founded upon an actual practice, custom or tradition of the particular group claiming the right.

Aboriginal title is a sub-set of Aboriginal rights and refers to an Aboriginal right to the exclusive use and occupation of land. Aboriginal title, as defined by the courts and outlined in the *Delgamuukw* SCC decision (1997) is a right to the land itself; it must be based on occupation prior to European sovereignty, be continuous and exclusive. The *Tsilhqot'in* SCC decision (2014) reaffirmed and clarified the test established in *Delgamuukw* for proof of Aboriginal title and determined that there must be evidence of exclusive use, and that title can apply to tracts of land regularly used for traditional purposes (hunting, fishing, trapping or foraging), and not “occasional entry and use”.

In *R. v. Powley* (2003), the SCC confirmed that Métis are a rights-bearing Aboriginal people under section 35 of the *Constitution Act* (1982). The components of a Métis definition for the purposes of claiming Aboriginal rights include the self-identification as a member of a Métis community; the ancestral connection to the historic Métis community whose practices ground the right in question; and the acceptance by the modern community with continuity to the historic Métis community (SCC 2003). Rather than “the pre-contact test” for the emergence of rights-bearing communities demanded of Aboriginal peoples in the earlier *Van der Peet* (1996) decision, which specifically excluded Métis, Powley acknowledges that “Métis cultures by definition postdate European contact” (para. 16). The Powley decision looks to “the post-contact ethnogenesis of the Métis” (para. 36) and emphasizes that “the focus should be on the period after a particular Métis community arose and before it came under the effective control of European laws and customs” (para. 37). The year upon which “effective control of European laws and customs” is established, according to Teillet (2006) will be different across the country.

23.1.2 Location of the Project in relation to Aboriginal Traditional Territories

The proposed Project is located within the traditional territory of the Secwepemc (Shuswap) Nation (Figure 23.1-1; Shuswap Cultural Education Society 2007). The Secwepemc Nation asserts interests to Secwepemcul'ecw territory, an area that encompasses approximately 145,000 km² of the central interior region of the province. The Simpcw First Nation (SFN), Adams Lake Indian Band (ALIB), Neskonlith Indian Band (NIB), and Little Shuswap Indian Band (LSIB) are members of the Secwepemc Nation. The Secwepemc Nation was composed of historic divisions with stewardship responsibilities for areas within the Nation (Figure 23.1-2). The Project Site is located within the asserted and historic territory of the North Thompson (Simpawl'ecw) Division (Teit 1909), which today is recognized as SFN territory (Figure 23.1-3; SFN 2010). Less than 0.1% of SFN traditional territory is overlapped by the Project. LSIB, ALIB, and NIB were historically referred to as the Shuswap Lakes Division (Teit 1909).

Figure 23.1-1

Secwepemc Nation Traditional Territory in Relation to the Project

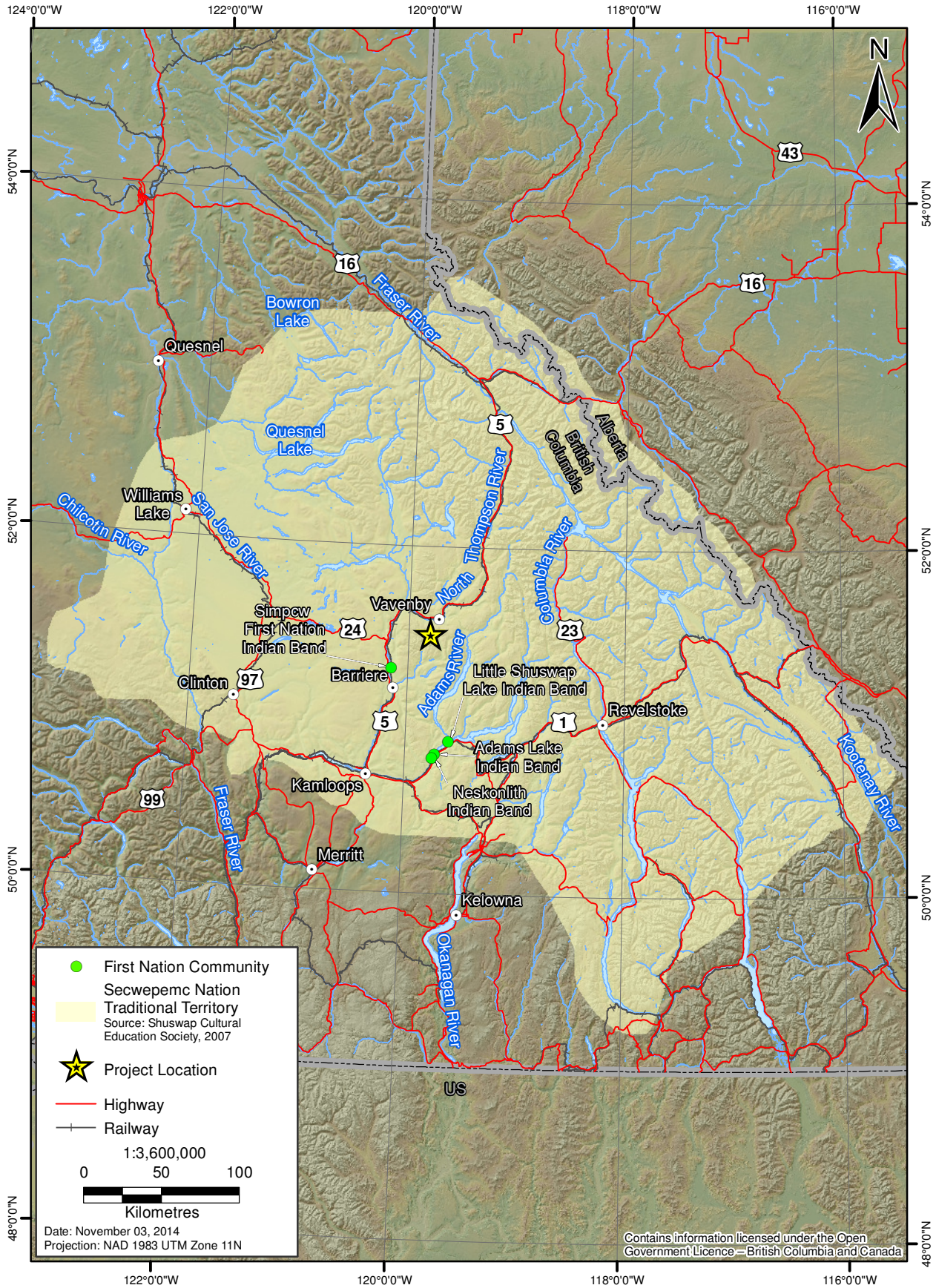


Figure 23.1-2

Historical Divisions within the Secwepemc Traditional Territory in Relation to the Project

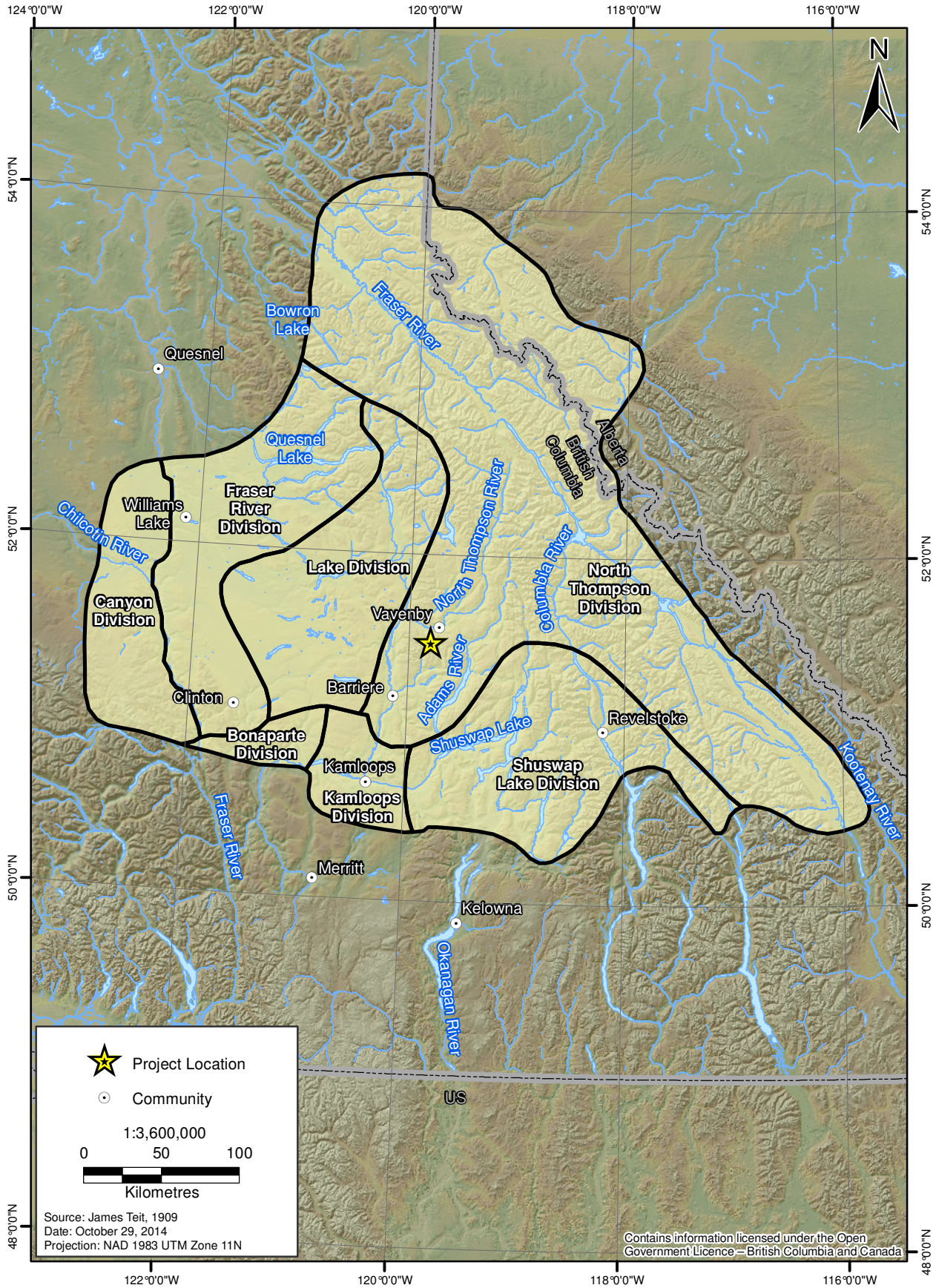
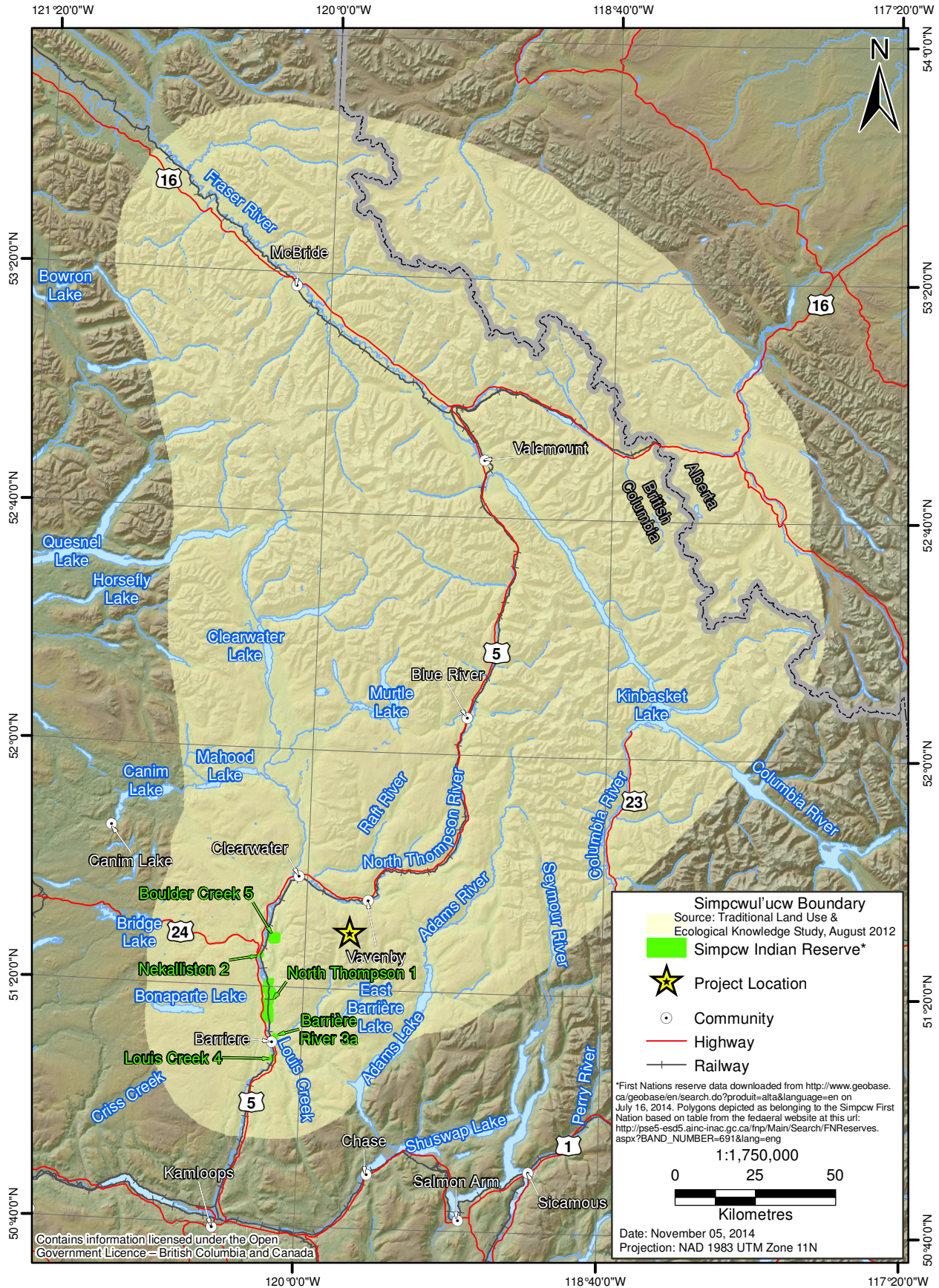


Figure 23.1-3

Simpcw First Nation Traditional Territory and Indian Reserves in Relation to the Project



This chapter is informed by the assessment undertaken by the Canadian Environmental Assessment Agency (CEA Agency) and the BC Environmental Office (BC EAO) with respect to aboriginal interests in relation to the Project. Letters sent to the ALIB, NIB and LSIB by the CEA Agency in August 2011 and the BC EAO in September 2012 indicate it is assumed that aboriginal rights within Secwepemc territory are held at the level of the historic divisions of Secwepemc Nation. Some ethnographic sources also indicate that Secwepemc people from different divisions could exercise aboriginal rights within each other's territories (Figure 23.1-2).

In 1996, three member bands of the historical Shuswap Lakes Division (Little Shuswap, Adams Lake, and Neskonlith Indian Bands) submitted a collective Reserve Claim for lands that encompass Monte Creek, Scotch Creek, Adams Lake, and an area north to Dunn Peak forming the geographic boundaries of the Neskonlith Douglas Reserve claim (Figure 23.1-4; Indian Claims Commission 2008). The claim alleged that a reserve had been legally created for them in 1862 by the British Crown which was later unlawfully reduced. The federal government rejected the claim in March 1999. In May 2003, the Bands requested that the Indian Claims Commission (ICC) conduct an inquiry into their rejected claim. In June 2008, the Indian Claims Commission panel recommended the Neskonlith, Adams Lake and Little Shuswap Indian Bands Neskonlith Douglas Reserve claim not be accepted for negotiation under Canada's Specific Claims Policy (ICC 2008).

The Project Site is outside of the boundary attributed to the historical Shuswap Lakes Division as well as the Neskonlith Douglas Reserve claim area. The north-west corner of the Neskonlith Douglas Reserve claim area is located several kilometres south of the Project Site and overlaps lower Harper Creek and the North Barrière Lake watershed, downstream of the Project.

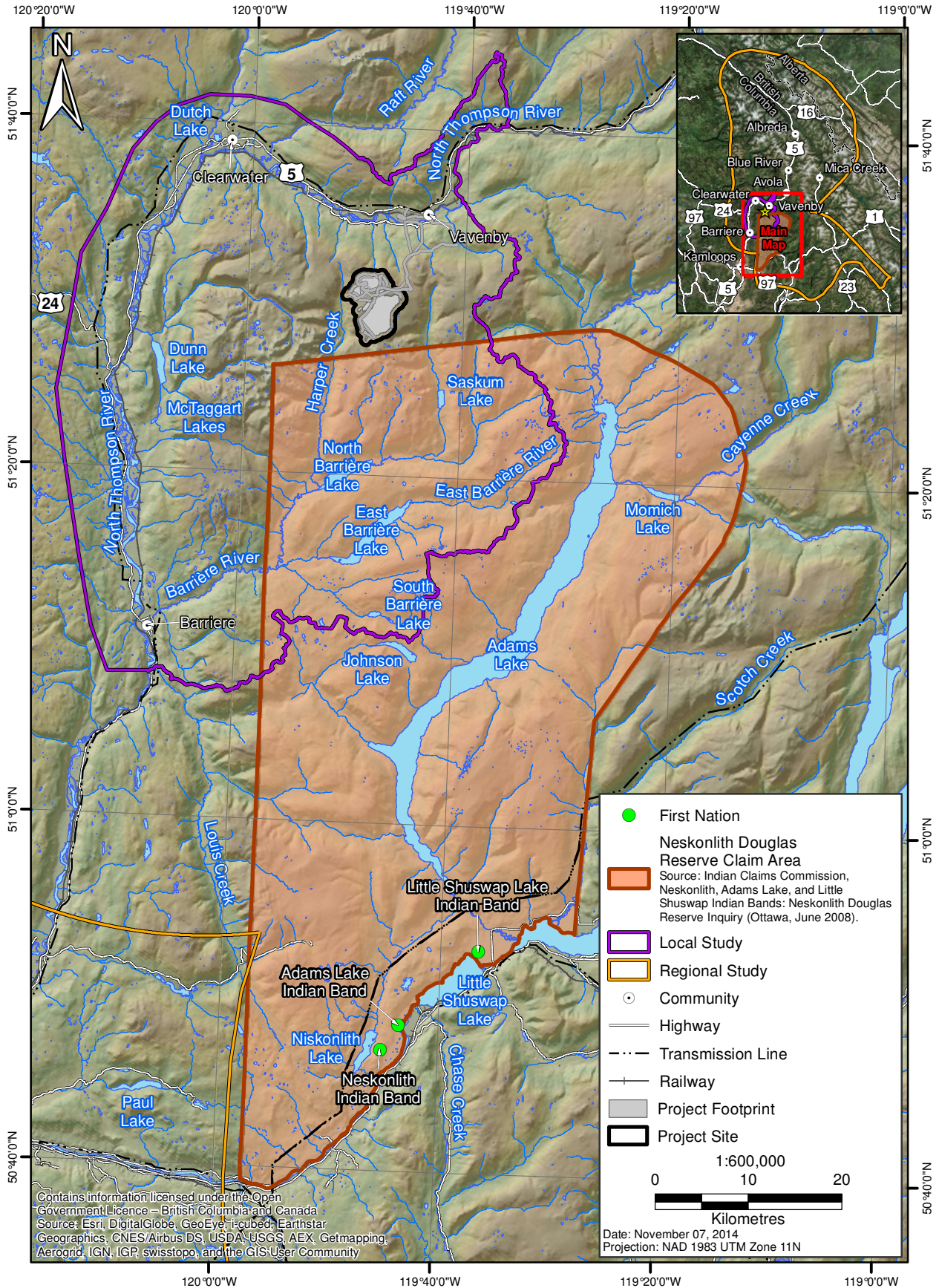
Historically, Métis have lived in the regional area of the Project, including in Barrière, Valemount, Clearwater and Blue River. Métis Nation BC (MNBC) citizens from adjacent chartered communities and nearby communities may exercise their Aboriginal right to harvest within the Project footprint. The regional area is historically significant to the Métis who assert traditional harvesting and hunting rights. These rights are not geographically constrained because specific harvesting areas for each chartered community have not been identified by the MNBC. The MNBC, unlike other Aboriginal groups, does not claim territories; instead, on behalf of their citizens, they assert rights and traditional uses over the entire province (MNBC 2010).

23.2 ETHNOGRAPHIC OVERVIEW

23.2.1 Secwepemc (Shuswap)

Secwepemc people speak Secwepemctsin, a Northern Interior Salish language within the Salishan language family, together with the Nlaka'pamux (Thompson) and St'at'imc (Lillooet) languages. Secwepemctsin has two major dialects, each with local variations (Kuipers 1974). The region throughout which Secwepemctsin and other Interior Salish languages are spoken falls within the Plateau culture area. Today, the Secwepemc people are working to preserve and promote their language, culture and history. The Cultural Education Society (CES) established in 1983, is devoted to these goals.

Figure 23.1-4
Neskonlith Douglas Claim
Reserve Area in Relation to the Project



Prior to contact, Secwepemc people were organized in nine divisions and 32 distinct bands (Teit 1909; [Appendix 22-A](#)). Disease epidemics and other factors reduced Secwepemc's population to the current 17 bands. Divisions and bands were culturally united through shared language, dwelling technologies, fish and game harvesting technologies, belief systems, and systems of territorial management. Regional differences between groups included specific harvesting techniques, trade networks, dialects and specific territorial boundaries ([Appendix 22-A](#)).

Along with Teit, other early ethnographic accounts of the Shuswap people in this area include Boas (1890), Dawson (1892), Morice (1895, 1905) and Ray (1939). More recent studies conducted with and by the Secwepemc include Palmer (1975a, 1975b), Kuipers (1974), Coffey et al. (1990), Bouchard and Kennedy (1979), Alexander (1992), Ignace and Ignace (2004), Thomson and Ignace (2005), and Ignace (2008).

Divisions

There were as many as nine recognized "tribal" divisions within the Secwepemc ethnolinguistic group, each with recognized territorial boundaries or areas of interest in which they had stewardship responsibilities and conducted the majority of their subsistence activities. The divisions with territorial boundaries overlapping the Project were identified by Teit (1909b) as the Texqe'kalltemux and the Sxsté'lnemux.

The Texqe'kalltemux ("people of the upper reaches or top"), otherwise the North Thompson division, includes the present-day SFN. Teit describes their hunting grounds as running "along Adams Lake, include Canoe River, part of the Big Bend of the Columbia [River], part of the Rocky Mountains region (around the head of the Athabasca), and the Upper Fraser [River] country north towards the head of Smoky River..."

Teit (1909b) refers to the Sxsté'lnemux (or Shuswap Lake division) of the Secwepemc as the people inhabiting the Upper South Thompson, Shuswap Lake and Spallumcheen River areas. "They hunt south along the Salmon River, north on Adams Lake to the Columbia above Revelstoke, and east around Mabel and Sugar Lakes to Upper Arrow Lake..." The ALIB, NIB, and LSIB are historically recognized as members of this division.

Seasonal Round

Secwepemc people lived a semi-nomadic lifestyle, following a seasonal round in accordance with the availability of specific foods. Around November, Secwepemc bands settled in villages composed of semi-subterranean, permanent pit-houses known as s7istcen ("winter homes"). The Secwepemc spent the winter months largely reliant on stored foods, particularly salmon. Stored foods were supplemented by dried roots and berries and occasionally complemented by fresh game (Dawson 1892; Teit 1909). Winter was a time of tanning hides, making clothes and weaving baskets. In April, people began to leave their winter dwellings and split into smaller socio-economic groups. These smaller groups would exploit various animal and plant resources. This would include the collection of roots using digging sticks. The roots would be either dried or cooked in earth ovens. Summer housing consisted of above-ground circular mat lodges, though bark or skins could be substituted as a covering (Teit 1909). Cambium from a variety of trees was also collected at this time, either to be

eaten raw or dried for winter use (Ray 1939). Migrating birds were also taken, using a variety of hunting methods.

Hunting and fishing likely supplemented their diet of roots and ripening berries. Hunting activities were done both communally and individually using a variety of technologies, including bows and arrows, spears, traps and fences. Early August saw the first of the salmon runs at which time the focus would become procurement and storing of fish. Fish were taken with bag-nets, weirs, spears, leisters, dip nets and trolled and dragged hooks. Salmon were eaten, smoked and dried, with roe prepared for eating and fish oil obtained by rendering. Some berry gathering was also carried out during the salmon season. Salmon was stored in cache pits at the end of this season (Teit 1909). The fall was spent gathering berries and roots as well as in hunting of land mammals.

Subsistence Resources

Secwepemc peoples traditionally harvested a wide variety wildlife, fish, and plants throughout their traditional territories. Animals hunted and snared included deer, elk, caribou, marmot, sheep, hare, beaver, grouse, bear, moose, duck, goose, crane, squirrel, porcupine, and turtles. Goat was not hunted by most bands, except when other game could not be obtained. Trapping became important after fur trading companies became established in the region. The primary fish species harvested by Secwepemc peoples included Pacific salmon (all species), sturgeon, trout, and whitefish (Boas 1890; Dawson 1892; Teit 1909). The main animals trapped were marten, mink, fisher, beaver, fox and lynx (Teit 1909).

Secwepemc peoples also gathered roots variety of plants, including tiger lily, spring beauty, wild onion, cinquefoil, Indian parsnip or carrot (*Ferula dissoluta*), yellow avalanche lily, sagebrush mariposa lily, wild parsley (*Peucedanum macrocarpum*), arrowleaf balsamroot, western waterleaf, bitterroot, camas, and chocolate lily (*Fritillaria lanceolata*). Berries that were harvested include service-berry, soapberry (*Shepherdia canadensis*), bilberry, huckleberry, choke-cherry, raspberry, thimble-berry, blackberry, gooseberry, currant, strawberry, elderberry, hawthorn (*Crataegus rivularis* Nutt), bearberry (or kinnikinnick, *Arctostaphylos uva-ursi*), cranberry, Oregon grape (*Mahonia aquifolium*), and wild rose hips. Other items gathered included black moss, mushrooms, the cambium of the black pine and the yellow pine and the aspen, and hazelnuts (Teit 1909; Palmer 1975a).

23.2.2 Métis

The Métis National Council adopted the following definition of “Métis” in 2002:

“Métis” means a person who self-identifies as Métis, is distinct from other Aboriginal peoples, is of historic Métis Nation Ancestry and who is accepted by the Métis Nation (MNC n.d.-a).

The Métis are descendants from the union of European (predominantly French and Scottish) men and First Nation women during the 17th and 18th century fur trade. The result was a genesis of a new Aboriginal people with their own cultural identity, settlements, language, and traditions (MNC n.d.-b).

The Métis emerged as a distinct people or nation in the historic Northwest during the course of the 18th and 19th centuries. These communities emerged along some parts of the freighting waterways

and Great Lakes of Ontario, throughout the Northwest, and as far north as the Mackenzie River. This area is known as the “Historic Métis Nation Homeland”, and includes the present-day three Prairie provinces, extending into Ontario, BC and the Northwest Territories. The Métis people of this region, although deeply rooted in their home communities, were connected through a highly mobile fur trade network, seasonal rounds, extensive kinship connections and a collective identity (i.e., common culture, language, way of life, etc.; MNBC n.d.-a). This historic Métis Nation had recognized Aboriginal title, which the Government of Canada attempted to extinguish through the issuance of “scrip” and land grants in the late 19th and early 20th centuries (MNC n.d.-a).

Similar to Métis across North America, the presence of Métis in BC can be linked to the fur trade. In the 1790s, Métis were present in the Peace River drainage and eastern slopes of the Rocky Mountains (MNBC n.d.-a). In addition, numerous Métis fur trade employees and their families could be found throughout the Columbia (present day southern BC and Washington State) and Athabasca (present day northern BC, Alberta, and southern NWT) Fur Trading Departments or Districts (Barman and Evans 2009).

23.3 ABORIGINAL SETTING

23.3.1 Overview

This section summarizes the Aboriginal setting, including socio-economic, language, cultural, and current use of lands and resources for traditional purposes. Given the First Nations included in the environmental assessment review process are part of the Secwepemc Nation (except for Métis), a First Nations Overview Socio-economic Assessment Report was prepared by YMI. The report discusses shared history among the Secwepemc First Nations, language and culture as well as education, economic development, employment and training. The full report is provided in [Appendix 23-B](#).

YMI also prepared a socio-economic baseline report for each Secwepemc First Nation. The Simpcw were involved in developing the template and the indicators used in each report. As per the Application Information Requirements, the reports included information on population, demographics, language, labour force and general economic setting¹. Some information has been updated in the reports using the information in [Appendix 17-A](#). YMI gratefully acknowledges the Simpcw department managers and staff for their input into the development of meaningful indicators for the socio-economic assessments. The reports are provided in [Appendix 23-B](#).

The First Nations Overview report and the baseline report produced for each First Nations were provided to the respective First Nations in November 2011 for review and comment. SFN provided comments, and approved the revised assessment report for their community. YMI used all reasonable efforts, including offers in 2011 and 2012 to provide resources to the ALIB, NIB, and LSIB to review the draft socio-economic report.

¹ Some of the socio-economic information presented in the summary in this chapter is taken from [Appendix 17-A](#), which includes updated socio-economic information.

Comments received from the ALIB in July 2012, did not provide detailed information to update or verify information in the report. The NIB provided comments and a proposal for further work in November 2012, and provided an updated report to YMI in December 2013. This report updated the November 2011 report. The LSIB reviewed their socio-economic report and provided comments that were incorporated into the report.

Information related to current Aboriginal land and resource use is summarized from Chapter 22, Section 22.4.3.

23.3.1.1 *Language and Culture*

The Secwepemc Cultural Education Society is devoted to preserving and promoting the language, culture and history of the Secwepemc people. It is governed by a Board of Directors with representation from 13 Secwepemc bands plus a representative of the Secwepemc Elders Council (SCES 2007). The Society has undertaken a number of initiatives to preserve and increase the number of Secwepemtsín speakers, and a Secwepemc Language Advisory Group has been established within School District No. 73 (Kamloops/Thompson), to lead language programs. Overall, the number of Secwepemtsín language speakers is said to be increasing.

23.3.1.2 *Education*

Public school education in the Secwepemc Nation traditional territory is governed by School District No. 73 (Kamloops/Thompson). With over 2000 Aboriginal students of First Nations and Métis ancestry (14%), the School District is committed to improving school success for Aboriginal students from Kindergarten to Grade 12. Supporting this endeavour has been Aboriginal Education Enhancement Agreements² between the BC Ministry of Education, School District, the First Nations Education Council with representation from seven Secwepemc Bands, two urban Aboriginal organizations, a representative from the Clearwater area, and two School Board Trustees. The First Nations in SNTC provide education from three elementary schools and five secondary schools [Adapted from Secwepemc Cultural Education Society, 2007].

23.3.1.3 *Post-secondary Education*

Post-secondary institutions within the region include:

- Thompson Rivers University satellite campus located in Barriere;
- Thompson Rivers University in Kamloops;
- Okanagan College in Salmon Arm;
- University of British Columbia satellite campus in Kelowna;
- Nicola Valley Institute of Technology in Merritt; and
- University of Northern British Columbia in Prince George.

² A copy of Aboriginal Education Enhancement Agreement is included in the *Harper Creek Copper-Gold-Silver Mine Project: Socio-Economic Assessment Report – First Nations Overview* ([Appendix 23-B](#)).

The Thompson Rivers University satellite campus provides training and education to the Lower North Thompson Valley (McLure to Little Fort), offering a variety of credit and non-credit courses, general interest, arts and recreational programs dependent upon the needs and interest of the communities [Thompson Rivers University Regional Centre, 2011].

Thompson Rivers University in Kamloops offers a unique combination of traditional degree programs, many allowing diploma and certificate program graduates access to degrees, along with flexible degree completion through distance education. In September 2011, Thompson Rivers University opened its Faculty of Law, Canada's newest law school in more than 33 years. The new Faculty welcomed 75 new students to an academic program that pays particular attention to legal issues related to the energy, natural resources, and the socio-economic challenges facing Canada's First Nation and Aboriginal communities.

Okanagan College offers career, continuing education, degree, developmental, trades and technologies, university transfer, and vocational programs.

The University of British Columbia satellite campus in Kelowna offers post-graduate programs, degree transfer programs, a University of British Columbia degree, and global linkages through the use of technology.

The Nicola Valley Institute of Technology is a unique institution where students are taught in a setting that promotes traditional ways and fosters student success. The Institute's programs, courses and services are reflective of Aboriginal perspectives, values and beliefs, offering a wide range of Aboriginal-oriented courses and programs such as College Readiness, Aboriginal Early Childhood Education Certificate, Aboriginal Early Childhood Education Diploma, Law Enforcement Preparation, Environmental Studies, Business, Health Care Assistant, Criminology, First Nation Studies, General Arts and a Bachelor of Social Work. The Institute is also well-known for its Environmental Resource Technology program.

The University of Northern British Columbia, with regional campuses in Quesnel, Fort St. John, and Terrace, has more than 60 academic programs leading to certificates, diplomas, and degrees in arts and sciences with an emphasis on northern needs.

23.3.1.4 *Training and Employment*

The Shuswap Training & Employment Program administers training and employment programs for SNTC members. The program works with employers/sponsors from the onset of a training initiative through to completion, and offers assistance with program information, proposal review, financial assistance and program/training evaluation. Other services to employers include job board advertising, screening and referral services, access to wage subsidies and client support (SNTC 2014).

Aboriginal Skills Employment & Training Services, based in Kamloops, is a department of SNTC. The organization receives funding from Human Resources & Skills Development Canada to provide training and employment opportunities to Aboriginal people within the Central Interior. It actively negotiates and provides access to and distributes financial resources related to Aboriginal Human Resource Development, and advocates the enlargement and enrichment of Aboriginal employment (Laurie McNeil & Associates 2012).

23.3.1.5 *Social Services*

Secwepemc Child and Family Services (SCFS) develop and deliver child protection services on behalf of seven Secwepemc First Nations, including ALIB, NIB, and SFN. The agency works in collaboration with the seven First Nations to protect children and prevent the abuse and neglect of all Secwepemc children (SCFS n.d.).

The SNTC is involved with natural resource management within the Secwepemc Nations' territory (and the creation of economic development opportunities for Secwepemc communities (SNTC 2009). The Shuswap Nation Tribal Council (SNTC) is a political organization working on matters of common concern to member First Nation bands, including the development of self-government and the settlement of Aboriginal land title questions. SNTC member bands are not involved in the BC treaty process but are engaged with the province in other discussions associated with land and resource use within asserted traditional territories (BC MARR, n.d.). Member Nations have their own governments, based on elected Chief and Council. Three of the four Aboriginal groups - the ALIB, NIB, and SFN are members of the SNTC. The Adams Lake and Neskonlith Indian bands, along with the Splots'in First Nation, form the Sexqeltkemoc (Lakes Division). The LSIB is participating in independent discussions with the Government of British Columbia outside of the treaty process and is not affiliated with any tribal council or treaty group.

23.3.2 **Simpcw First Nation**

23.3.2.1 *Governance*

The SFN is governed by a Band Council which consists of a Chief and six Councillors elected for a three-year term. They have a custom electoral system (AANDC n.d.).

23.3.2.2 *Population and Communities*

SFN has five Indian reserves totalling 1,500.7 ha (AANDC n.d.; Table 23.3-1). Figure 23.1-3 identifies Simpcw Indian reserves. North Thompson IR# 1 ("Chu Chua", or Neqwéqwelsten), on the east side of the Thompson River and Highway 5, approximately 79 km north of Kamloops, is the main community of SFN, with a population of 252 in 2011, a 6.8% increase from 2006 (Statistics Canada 2012). As of May 2014, the SFN had 698 registered members (AANDC n.d.); nearly 65% of SFN members live off-reserve.

23.3.2.3 *Education, Skills and Training*

Simpcw's Education Department oversees elementary, secondary, post-secondary and employment training, and employs a full-time Education Program Manager. Services provided by the Education Department include monitoring of the *Local Education Agreement* with School District No. 73, running an after-school homework program, parental support, and administering post-secondary applications. Simpcw are members of a First Nations Education Council with representation from seven Secwepemc bands, two urban Aboriginal organizations, District of Clearwater, and two School Board Trustees.

Table 23.3-1. Simpcw Indian Reserves

Name	Location	Hectares
North Thompson Reserve #1	Kamloops District on the left bank of the North Thompson River about 20 kilometres from Barriere and 45 miles north of Kamloops. Notable features: <ul style="list-style-type: none"> • Community of Chu Chua Infrastructure: <ul style="list-style-type: none"> • Offices for Band administration, Lands Department, and Sustainable Resources Department • Neqweyqwelsten School • health centre • recreation facility • baseball diamond • event hall (spiritual centre, community centre, etc.) • former sawmill site (currently rented) • combination piped water and private wells • garbage pickup and recycling • high-speed Internet & satellite TV; no cell phone service or cable 	1,236.1
Nekalliston Reserve #2	Kamloops District near Little Fort and opposite Nekalliston Creek 50 miles north of Kamloops.	1
Barrière River Reserve #3A	Kamloops District on the left bank of the Barrière River about 2 miles from the mouth of the North Thompson River.	1.6
Louis Creek Reserve #4	Kamloops District on the left bank of Louis Creek about ¼ mile from its confluence with the North Thompson River, about 34 miles north of Kamloops.	3
Boulder Creek Reserve #5	Kamloops District, Lots 4088, north of Dunn Lake.	259

Source: Aboriginal Canada Portal (2011)

The Neqweyqwelsten School in Chu Chua offers full-day kindergarten through to Grade 7, educating students using the standard curriculum and in the Secwepemctsin language. Secondary school students are bussed to Barriere High School. There were 26 high school students in 2011. Since 2006, 31 Simpcw First Nation members graduated from high school.

Forty-two percent of residents aged 15 and over had obtained some kind of post-secondary certificate, diploma or degree compared to the provincial average of 55%. The percentage of residents aged 15 and over who had obtained an apprenticeship or trades certificate or diploma (10.5%) was similar to that of the Province as a whole (Statistics Canada 2013).

Of the 125 Simpcw age 25 to 64 in 2006, 88% had a high school certificate and/or equivalent and/or post-secondary education, compared to 43% of the BC Aboriginal population (Statistics Canada 2009). As of 2006, Simpcw post-secondary patterns closely paralleled the BC population with the exception of university graduates (14% less than the general population; [Appendix 23-B](#)).

23.3.2.4 *Economic Development*

In addition to their traditional economy of fishing, hunting, and gathering, the SFN is involved in a wide range of business ventures and projects including partnerships related to forestry, mineral exploration and mining, hydro, forest fire fighting, tourism developments, and construction.

The SFN has two departments responsible for Simpcw's economic development plans. The Lands Department administers on-reserve land transactions such as leases, permits, and registration of land transfers. It also provides information support services for Crown land referrals, archaeology sustainable resource management, community planning and overall administration.

The Sustainable Resource Department of SFN manages the Dunn Lake Hatchery, in partnership with Fisheries and Oceans Canada. While the main focus is conservation and management of fish stocks, it also manages fisheries programs such as: a Chinook enumeration program on Raft River, Finn, Lemieux and Louis creeks; catch monitoring; stewardship and habitat restoration projects for the Upper Fraser River and North Thompson River watersheds; and summer youth programs. The department also plays an active role in Neqweyqwelsten School's cultural program. The hatchery employs one to two people full-time year-round (Laurie McNeil & Associates 2012).

SFN partnered with Albreda Lodge and Mike Wiegele Helicopter Skiing in the development of Albreda Lodge, a high end accommodation near Blue River primarily servicing the heli-skiing tourism industry. SFN also has a joint venture with TransAlta Corporation on the Bone Creek run-of-the-river hydroelectric project near Blue River (Laurie McNeil & Associates 2012). TKnomentem Energy Solutions (TES) is a LLP partnership between Simpcw Resources LLP and Highland Powerlines Ltd. TES's services include powerline construction, and supports the training of SFN members and First Nations in the area of trades and energy management. SFN also signed a Relationship Agreement in 2014 with ATCO Energy Solutions to develop opportunities from energy projects for SFN members.

Between July 2011 and March 2012, Simpcw members worked approximately 195 person days on the collection of baseline information for the Harper Creek Project. Simpcw members also did core and line cutting and provided First Aid services on the Project Site.

23.3.2.5 *Employment*

Residents of Chu Chua had a labour force participation rate of 65.8% in 2011 roughly equivalent to the provincial median (65%). The unemployment rate was 24% compared to the provincial rate of 7.8%. Forty percent of the labour force was employed in public administration, most likely through the local band office or band-administered institutions such as the school or health centre. Trades and natural resource-related occupations employed 28% of the labour force (Statistics Canada 2013).

23.3.2.6 *Health and Social Services*

The Simpcw Health Board is managed by nine volunteers from the community. It oversees the Health Department, which has a full-time health manager, a community health nurse, a community health worker, and a wellness coordinator. Programs provided by the Health Department include

patient transportation; Aboriginal, Home and Community Care; Youth and Integrated Case Management; and a Head Start program (Laurie McNeil & Associates 2012).

There is a six-unit Elders complex on Chu Chua providing an independent living option for some Elders (Laurie McNeil & Associates 2012). SFN has an active Youth Council and program involving most of the community youth between the ages of eight and 18. Community members organize sports and recreation/cultural activities for youth (Laurie McNeil & Associates 2012). A recreation facility as well as a baseball diamond is also located on reserve.

23.3.2.7 *Emergency Services*

Policing services for Chu Chua is provided by the RCMP in Barriere. Fire protection is provided by the Chu Chua Volunteer Fire Department. The BC Ambulance Unit in Barriere provides ambulance service to Chu Chua (Laurie McNeil & Associates 2012).

23.3.2.8 *Language and Culture*

The SFN speak the Northern Shuswap dialect of Secwepemctsin. In a 2014 survey, less than 1% of surveyed band members spoke Secwepemctsin fluently, while 2% understood and spoke the language, and another 7% were described as “learning speakers” (FPHLCC n.d.). Secwepemctsin is taught in Kindergarten to Grade 7 at Neqweyqwelsten School, and Secwepemctsin language instruction is offered in the elementary and high school in Barriere.

SFN has partnered with other organizations to initiate three significant cultural programs (Laurie McNeil & Associates 2012):

- The Raft River Viewing Platform (located 5 kilometres north of Clearwater) –allows visitors to view salmon as they return to their home waters to spawn, and Simpcw traditional fishing methods such as gaffing and seine netting.
- The Raft River Interpretative School Program – teaches students from Barriere Elementary, Neqweyqwelsten, Raft River, Vavenby and Blue River Elementary schools about returning salmon, Simpcw culture, and other topics related to environmental stewardship; 644 students participated in the 6th annual school program in 2010.
- The First Fish Ceremony (held at the Raft River Viewing Platform) – is held every August to celebrate the return of the salmon.

23.3.2.9 *Current Use of Lands and Resources for Traditional Purposes*

Fishing

Although the Simpcw have not identified specific fishing sites or areas in upper Harper Creek, they have indicated they currently fish for Bull trout in upper Harper Creek, and rainbow trout in the LSA; sockeye, coho, Chinook, Bull trout and rainbow trout from the North Thompson River; and sockeye, coho and Chinook salmon from the Barrière River (Tables 4 and 5, Simpcw TLU& EKS). Table 23-C1 (in [Appendix 23-C](#)) lists fish resources harvested by the SFN based on the information provided in their TLU & EKS ([Appendix 22-A](#)).

Based on Schedule G-1 of the Comprehensive Fisheries Agreement (2008), Simpcw current fishing locations include:

- Raft River using a harpoon/spear, seine net and fence net for sockeye and chinook;
- North Thompson River mainstem near Barriere using gill net for sockeye and chinook;
- Clearwater River using dip net for chinook;
- Barrière River using fence for sockeye;
- Dunn Creek using fence for coho; and
- Holmes River using a dipnet for chinook.

Hunting and Trapping

As indicated in Section 4.5 of the Simpcw TLU & EKS, Simpcw have traditionally harvested caribou, grouse, waterfowl and turtle, as well as moose, elk, Big Horn sheep, deer, porcupine, marmot, occasionally grizzly bear, black bear and mountain goat, in accordance with the seasonal movements and availability of sustainable food ([Appendix 22-A](#)). Simpcw have traditionally trapped beaver, marten, fisher, fox, black bear, lynx, and bobcat (for trade) and rabbit, muskrat, marmot, badger and wolverine (for subsistence use). According to the SFN TLU & EKS, Simpcw historically shared caribou hunting territories from north of Adams Lake, throughout the TumTum, Oliver, Finn, and Avola Creek Areas with members of the historical Shuswap Lakes Division ([Appendix 22-A](#)). Documented hunting sites are outside of the Current Aboriginal Use LSA but within the RSA.

Baldy Mountain (Figure 22.4-2; in the Current Aboriginal Use LSA) was identified by the Simpcw as home to small, but sufficiently numerous herds of mountain caribou. Harp Mountain (in the Current Aboriginal Use LSA) was also identified by Simpcw as a place where caribou were hunted in the past. Due to past and current forestry and other activities in this area, the Project Site is not managed for caribou, and there is no evidence of current hunting in the Project Site or LSA. Harp Mountain was identified generally as a harvesting and food gathering area.

The Simpcw suggested that the Project is in “prime Mountain caribou habitat” and that caribou migrate through the LSA (Section 10 of the TLU & EKS; [Appendix 22-A](#)). However, no caribou tracks were observed during baseline snow-tracking surveys. An incidental observation of caribou tracks was reported at an unspecified location along Harper Creek Forest Service Road by Summit (2009), and two additional potential tracks were recorded in the LSA. It was not confirmed if these were in fact tracks. Caribou use of the LSA is likely limited (Section 16.4.3.13).

Mountain caribou were assessed for potential Project-related effects (Table 16.6-38). All three potential effects were scoped out of the assessment for caribou. Caribou were considered a VC because they are a species of interest. However, because they are not present in the LSA (Section 16.4.3.13; [Appendix 15-A](#)), no effects are expected to interact with mountain caribou.

Table 23-C2 (in [Appendix 23-C](#)) lists wildlife harvested by the SFN based on the information provided in their TLU & EKS ([Appendix 22-A](#)). To date, the Simpcw have not identified current hunting and trapping areas within the Current Aboriginal Use LSA.

Plant Gathering

As indicated in Section 4.5 of the Simpcw TLU & EKS, the Simpcw gathered a variety of different plant species, including fir, horsetail, mosses and grasses (in the Spruce-Subalpine Fir zone), paper birch, red cedar, and Kinnikinnick (in the Interior Cedar-Hemlock zone), and Saskatoon, Xusem (soapberry), wild potato, balsam root, and black cottonwoods (in the Interior Douglas Fir zone) ([Appendix 22-A](#)). Table 3 of the Simpcw TLU & EKS identifies plant species important to SFN that may be impacted by the Project which includes wild rose, blueberry, juniper, desert parsley, Indian celery, biscuit root or camas, cinquefoil, and Saskatoon.

Tables 1 and 2 of the TLU & EKS identify traditional food gathering sites in the LSA and RSA used for the Simpcw TLU & EKS. Sites in the LSA include areas near Vavenby, Harp and Vavenby Mountains, Harper Creek, along the North Thompson River from Vavenby to Messiter, north and south shores of the North Thompson River between Vavenby and Clearwater, and the south side of the North Thompson River, and both sides of Chuck Creek.

Table 23-C3 (in [Appendix 23-C](#)) lists plant resources harvested by the SFN based on the information provided in their TLU & EKS ([Appendix 22-A](#)). The list does not identify where plant resources are harvested. To date, the Simpcw have not identified current plant gathering areas within the Current Aboriginal Use LSA.

Traditional Sites (Use of Habitations, Trails, and Cultural and Spiritual Sites)

As indicated in the Simpcw TLU & EKS, historic winter villages were located in the North Thompson River at Vavenby, Birch Island, Finn Creek, Louis Creek, and Barrière River (all within the LSA; [Appendix 22-A](#)). Simpcw camped near Clearwater (in the LSA) during resource gathering activities. Other camping locations during extended harvesting trips were in highland areas, such as at Foghorn Mountain, Saskum Mountain, Harp Mountain, and Chu Chua Mountain, all within the LSA (Figure 22.4-2).

Tables 1 and 2 in the Simpcw TLU & EKS identify traditional place names (Figure 22.4-2), habitations, sacred places and transportation routes within the LSA and RSA utilized by SFN. Transportation routes in the LSA include from Clearwater Peak, southeast to the Adams River, including Raft Peak, Vavenby, and Harp and Vavenby mountains. Another transportation route was located on the south side of the North Thompson River, Jones Creek watershed south to Sesqu'em Lake. There was also a transportation corridor along Harper Creek, and from East Barrière and North Barrière lakes, up Harper Creek to Birch Island. The Simpcw TLU & EKS indicates these transportation corridors were used for hunting, gathering and trapping.

23.3.3 Adams Lake Indian Band

23.3.3.1 Governance

ALIB is governed by a Band Council which consists of a Chief and five Councillors elected for a three-year term. They have a custom electoral system (AANDC n.d.). The ALIB is also a member of the Sexqelk'emc te Secwepemc (Lakes Division of the Secwepemc Nation; Neskonlith n.d.).

23.3.3.2 *Population and Communities*

The ALIB (Sexqeltqín) has seven Indian reserves totalling 2,908.8 ha (AANDC n.d.; Table 23.3-2). Sahhaltkum³ IR#4 on the north side of the Thompson River adjacent to the village of Chase at the mouth of Little Shuswap Lake, is the main community of the ALIB, with a population of 320, a 3.2% increase from 2006 (Statistics Canada 2012). Figure 23.3-2 identifies ALIB Indian reserves. As of May 2014, the ALIB had 760 registered members (AANDC n.d.); 45% of ALIB members live off-reserve.

Table 23.3-2. Adams Lake Indian Band Reserves

Name	Location	Hectares
Hustalen Reserve #1	Kamloops District in Sections 7, 8, 9, 15, 16, 17, 18, 21, 22, TP.23, R.12, west 6 metres, at south end of Adams Lake at outlet into Adams River. Notable features: <ul style="list-style-type: none"> • accessed by ferry • one Band member family lives on this reserve • reserve used by Band members for various traditional food and medicines Services and utilities: <ul style="list-style-type: none"> • individual wells and septic tanks 	881.40
Squaam Reserve #2	Kamloops District, on north shore of Squam Bay, west side of Adams Lake. Services and utilities: <ul style="list-style-type: none"> • none 	32.40
Toops Reserve #3	Kamloops District, on west shore of Adams Lake, at outlet into the Adams River. Services and utilities: <ul style="list-style-type: none"> • none 	10.10
Sahhaltkum Reserve #4	Kamloops District in Sections 4-11, 15, 20-22, 26-29, 32-35, TP.21, R.13, west 6 metres on right bank for South Thompson River southwest of Little Shuswap Lake. Notable features: <ul style="list-style-type: none"> • near Chase • largest reserve • majority of on-reserve Band members live on this reserve (95 homes) Services and utilities: <ul style="list-style-type: none"> • Band Administration Office • Health Centre • Chief Atahm School and Sahhaltkum Day Care • Adams Lake Recreation & Conference Centre, including fitness and cultural centre • fire hall • community hall • garage • clubhouse • church • workshop • piped water system • sewer hookup to Chase 	1,432.60

³ Sahhaltkum, or Sexqeltqí, is identified by Teit (1909) as the Secwepemctsin.

23.3.3.3 *Education, Skills and Training*

The Chief Atahm School is a parent-operated Secwepemc language immersion school, administered by the ALIB (ALIB n.d.). In 1987 members of the community who were concerned about the loss of the Secwepemc language started a language nest, borrowing a model from the Maori “Te Kohanga Reo” early childhood immersion program. Building on this work, the Band established the Chief Atahm School in 1991.

The School’s overall goal is to increase the number of individual fluent speakers within the community. Staff, parents and Elders work together to support the immersion program which includes:

- a language nest – an immersion-based approach to language revitalization by inter-generational language transference, accomplished by having older speakers of the language take part in early childhood education (originated as a part of the Māori language revival);
- a nursery/kindergarten Secwepemc language program;
- a primary Secwepemc language program from Grades 1 to 3; and
- a partial programming in the Secwepemc language with the remainder in English for Grades 4 to 9.

The School provides resource materials to other bands, organizations and language instructors, and hosts an annual language conference for other indigenous nations interested in Aboriginal language immersion. The school also offers high school and adult evening classes.

The Switsemalph Learning Center is located in Salmon Arm on Switsemalph IR 6. It was built in 1998 to offer opportunities for adults to upgrade literacy and to take courses in Conservation and Outdoor Recreation (CORE), accredited through School District #83 (North Okanagan-Shuswap; ALIB n.d.)

In 2011, forty percent of residents aged 15 and over had obtained some kind of post-secondary certificate, diploma or degree compared to the provincial average of 55%. About 8.5% of residents aged 15 and over had obtained an apprenticeship or trades certificate or diploma, slightly lower than the Province as a whole (Statistics Canada 2013).

23.3.3.4 *Economic Development*

The Adams Lake Development Corporation (ALDCO) is the economic arm of ALIB. They primarily oversee two businesses - ALDCO Homes (West Harbour Village, Salmon Arm), and ALDCO Woods, a 10,000 square-foot covered sawmill in Chase (ALIB n.d.). The band’s Forestry Department manages Woodlot 315 and sells wood logged from the woodlot to ALIB members.

The ALIB is in the preliminary stages of developing a shopping and gaming centre in Salmon Arm. The shopping centre is planned for the Band’s Lot 7 that lies between the Trans-Canada Highway and the back of the Mall at Piccadilly. The gaming centre is proposed for the former site of the General Motors dealership bordered by 10th Avenue SW and the highway. A 49-year lease has been secured for the land through the Department of Aboriginal Affairs and Northern Development Canada.

The ALIB communal fishery utilizes a commercial style aluminum gill net boat equipped with 600' × 40' gill nets of 5 ¼" and 8" mesh. In the past few years the Band's communal fisheries has strived to become a conservation minded near-terminal fishery. The communal fishery also supports other Secwepemc First Nations when their access to salmon is limited.

All of the ALIB reserves have leased land from which the Band receives rental and tax revenues, Switsemalph Reserve #7 in particular which is situated in Salmon Arm. Other Band economic activities include commercial leasing, a health club, a campsite, and a laundromat.

23.3.3.5 *Employment*

Residents of Sahhalkum IR#4 had a labour force participation rate of 48.9% in 2011, compared to the provincial median (65%). The unemployment rate was 13%⁴ compared to the provincial rate of 7.8%. Around 43% of the labour force was employed in public administration, most likely through the local band office or band-administered institutions such as the school or health centre. Trades and natural resource-related occupations employed 26% of the labour force (Statistics Canada 2013).

23.3.3.6 *Health and Social Services*

The Nexeyélst/Pierre Moyese Centre on Switsemalph IR#6, near Salmon Arm, along with administrative functions, provides health and social services. The Sexqeltqin Health Centre on Sahhalkum IR#4 provides programs and services including Aboriginal Headstart, prenatal and post-natal care, a dental program and an elder's program (ALIB n.d.).

A social development worker is employed on the reserve. Sahhalkum daycare is a provincially licensed child care facility providing services to the ALIB, the Chase community, and the surrounding Bands. ALIB also has a youth program that provides cultural education and encourages physical and social activity (ALIB n.d.).

The Adams Lake Recreation and Conference Centre, located on Sahhalkum IR#4, contains a gymnasium, fitness centre, meeting rooms, and a commercial kitchen (ALIB n.d.).

23.3.3.7 *Emergency Services*

Policing services for the ALIB are provided by the RCMP detachments at Chase and Salmon Arm. There is a fire hall on Sahhalkum IR#4 run by volunteer fire fighters. Ambulance service is also provided out of Chase.

23.3.3.8 *Language and Culture*

The ALIB speak Secwepemctsin. In a 2014 survey, only 3% of surveyed band members spoke Secwepemctsin fluently, while about 13% understood and spoke the language, and another 12% were described as "learning speakers" (FPHLCC n.d.). Chief Atahm School, located on Sahhalkum IR 4, is a Secwepemc language immersion school, and has been effective at increasing the knowledge of Secwepemctsin among youth.

⁴ This is likely due (at least partly) to the low labour participation rate.

23.3.3.9 *Current Use of Lands and Resources for Traditional Purposes*

Tables 23-C1 through 23-C3, in [Appendix 23-C](#) lists fish, wildlife, and plant information provided by the ALIB to the BC EAO in June 2011.

Available secondary source literature indicates that ALIB, NIB and LSIB hunting, trapping and gathering, sites and areas, and use of habitations, trails, cultural and spiritual areas, are utilized collectively as members of the Shuswap Lakes Division.

Fishing

Based on Schedule G-1 of the Comprehensive Fisheries Agreement (2008), ALIB current fishing locations include:

- Little Shuswap Lake using a gill net set from communal fishing boat for sockeye and chinook;
- Scotch Creek using the stock enumeration weir for sockeye;
- Lower Adams River using dip nets, gaffs, and spears for sockeye and chinook; and
- South Thompson River, Little River and Shuswap Lake near the mouth of Adams River using beach seine for sockeye and chinook.

Based on the review of publically available secondary source materials identified in Section 22.4.2, and YMI's consultations with the ALIB, the ALIB have not identified fishing sites or areas within the Current Aboriginal Use LSA.

Hunting and Trapping

The hunting area known as *Mumix* is located approximately 75 miles from the Adams Lake and Neskonlith Indian reserves, at the north end of Adams Lake (in the Current Aboriginal Use RSA and outside the Current Aboriginal Use LSA) (Secwepemc Nation n.d.). Hunters would set up camp in this hunting area and stay for extended periods hunting and preserving moose and deer for the winter (Secwepemc Nation n.d.).

Based on the review of publically available secondary source materials identified in Section 22.4.2, and YMI's consultation efforts with the ALIB, the ALIB have not identified current hunting or trapping areas within the Current Aboriginal Use LSA.

Plant Gathering

The *Mumix* hunting area at the north end of Adams Lake was also utilized for gathering huckleberries and other berries, as well as gathering cedar roots and medicinal plants (Secwepemc Nation n.d.). Sun Peaks was especially important for harvesting roots (spring beauties & avalanche lilies), berries and medicinal plants. The area between Neskonlith and McGillivray lakes (outside the Current Aboriginal Use RSA), was also a fishing, hunting and camping area (Spirit Map n.d.).

Scotch Creek (*Cemetetkwe*) was an important berry picking area. People gathered cedar roots and birch bark here for making baskets. It was also a stopover camp on the travel route from the Neskonlith and Adams Indian reserves to the north end of Adams Lake (Secwepemc Nation n.d.).

Based on the review of publically available secondary source materials identified in Section 22.4.2, and YMI's consultation efforts with the ALIB, the ALIB have not identified current gathering areas within the Current Aboriginal Use LSA.

Use of Habitations, Trails, and Cultural Landscapes

In June 2011, ALIB provided BC EAO with a list of archaeological sites in the Kamloops Timber Supply Area that are associated with ALIB traditional use activities. These sites are not recorded in the Heritage LSA and RSA (Table 20.4-1 of Chapter 20).

Based on the review of publically available secondary source materials identified in Section 22.4.2, and YMI's consultation efforts with the ALIB, the ALIB have not identified habitations, trails, cultural or spiritual sites that are currently used within the Current Aboriginal Use LSA.

23.3.4 Neskonlith Indian Band

23.3.4.1 Governance

NIB is governed by a Band Council which consists of a Chief and six Councillors elected for a 3-year term. They have a custom electoral system (AANDC n.d.). The NIB is also a member of the Sexqeltkemoc te Secwepemc (Lakes Division of the Secwepemc Nation; Neskonlith n.d.).

23.3.4.2 Population and Communities

NIB has three Indian reserves totalling 2,811.2 ha (AANDC n.d.; Table 23.3-3). Figure 23.1-4 identifies Neskonlith Indian reserves. Neskonlith IR#1 and #2, on either side of the lower Thompson River about 5 km southwest of Chase, were amalgamated as one census community in 2011, with a combined population of 237, a 15% increase from 2006 (Statistics Canada 2012). As of May 2014, the NIB had 649 registered members (AANDC n.d.); more than 50% of Neskonlith members live off-reserve.

23.3.4.3 Education, Skills and Training

Neskonlith children attend the Chief Atahm School on the Adams Lake reserve (Sahhaltkum IR#4). The Neskonlith Education Centre partners with the Distance Education Program in order to offer students a variety of grade 8 to 12 courses in both print and on-line format (Neskonlith 2013). The Centre has relationships with School Districts #73 (Kamloops-Thompson) and #83 (North Okanagan-Shuswap), as well as post-secondary institutions and Aboriginal education organizations (Neskonlith 2013).

The Neskonlith Education Center has relationships with School Districts #73 (Kamloops-Thompson) and #83 (North Okanagan-Shuswap), as well as local post-secondary institutions and Aboriginal education organizations (Neskonlith 2013). Adult education services provided by the Neskonlith Education Centre include:

- adult basic education and upgrading;
- tutoring services; and
- introduction to trades and special employability programs.

Table 23.3-3. Neskonlith Indian Band Reserves and Infrastructure

Name	Location	Hectares
Neskonlith Reserve #1	Kamloops District, all sections west 6 metres, on right bank of South Thompson River, 4 miles below Little Shuswap Lake. Notable features: <ul style="list-style-type: none"> • agriculture production • co-op and demonstration farm • silviculture program Services and utilities: <ul style="list-style-type: none"> • irrigation system • water treatment plant 	1,280.4
Neskonlith Reserve #2	Kamloops District, all sections west 6 metres, on left bank of the South Thompson River, 1 mile south of Shuswap Canadian Pacific Station. Notable features: <ul style="list-style-type: none"> • main administrative office • Social Wellness Building • community hall and church • gas station and store • Commerce Park and highway development (in progress) Services and utilities: <ul style="list-style-type: none"> • accessible by gravel road • piped water supply • septic tanks 	989.3
Switsemalph Reserve #3	Kamloops District, on west shore of Salmon Arm of Shuswap Lake. Notable features: <ul style="list-style-type: none"> • Melamen Centre • resort development on Neskonlith Lake (in progress) Services and utilities: <ul style="list-style-type: none"> • commercial grade water and sewage infrastructure (in progress) 	517.0

Source: *Aboriginal Canada Portal (2011)*

In 2011, forty-seven percent of Neskonlith residents aged 15 and over had obtained some kind of post-secondary certificate, diploma or degree compared to the provincial average of 55%. Nearly 18% of residents aged 15 and over had obtained an apprenticeship or trades certificate or diploma, nearly twice that of the Province as a whole (Statistics Canada 2013)

23.3.4.4 Economic Development

The Sk'atsin Resources Corp. assists Neskonlith band members who wish to establish private ventures. The Corporation also negotiates employment opportunities with government and industry looking to establish new ventures or expand existing operations within the Neskonlith caretaker area (Neskonlith 2013).

Neskonlith Eco-Homes, a band-owned business, is building homes with innovative structural insulated panels that are eco-friendly, mould-free, and energy efficient. The NIB also operates a

40-acre demonstration farm and silviculture program. A number of Band members operate small hay and/or cattle farms, a gas station, and a store (Neskonlith 2013). The Band is exploring the possibility of developing a rustic type of resort on Neskonlith Lake at Switsemalph IR#3.

Infrastructure Upgrades – The Neskonlith Economic Development Department is actively upgrading community infrastructure to encourage potential investors. A new irrigation system will re-establish agriculture production in IR#1. On IR#2, new highway development is being explored with the Ministry of Highways as well as establishing a commerce park, which has the support of the Village of Chase. On IR#2, a tripartite water project and future sewage project is being completed to enable development on the bench lands above the village.

The Band also operates a 40-acre demonstration farm and silviculture program. A number of Band members operate small hay and/or cattle farms, a gas station, and a store.

23.3.4.5 *Employment*

Residents of Neskonlith had a labour force participation rate of 60% in 2011 compared to the provincial median of 65%. The unemployment rate was 38.1% compared to the provincial rate of 7.8%. Nearly 45% of the labour force was employed in public administration, most likely through the local band office or band-administered institutions such as the education or health centre. Sales and service occupations also employ about 20% of the labour force (Statistics Canada 2013).

23.3.4.6 *Health and Social Services*

Health services for Neskonlith members are provided by the Neskonlith Band Health Centre and the Q'wemtsin Health Society. Neskonlith Band Health Centre is located in Salmon Arm and employs a social worker, health nurse, and social development worker. The Homemaker Service Program is geared towards persons with disabilities, persons with persistent multiple barriers, and guardian financial assistance (Neskonlith 2013). The Secwepemc Stsememelts Yecwmintns Daycare is a fully licensed daycare, with support from the Neskonlith Education Centre.

23.3.4.7 *Emergency Services*

Policing services for the NIB are provided by the RCMP detachments at Chase and Salmon Arm. Ambulance services are also provided out of these centres. There is no fire hall on Band land but the community is served by the Chase Volunteer Fire Department (Neskonlith 2013).

23.3.4.8 *Language and Culture*

The NIB speak Secwepemctsin. In a 2014 survey, 1% of surveyed band members spoke Secwepemctsin fluently, while nearly 4% understood and spoke the language, and another 4% were described as “learning speakers” (FPHLCC n.d.).

About a quarter of Neskonlith Band members have knowledge of an Aboriginal language, with close to half of the 45+ population knowing an Aboriginal language and a quarter of the 0-14 age group. Notably, there was a 5% increase in an Aboriginal language as a mother tongue between 1996 and 2006.

23.3.4.9 *Current Use of Lands and Resources for Traditional Purposes*

Fishing

Based on Schedule G-1 of the Comprehensive Fisheries Agreement (2008), NIB current fishing locations include:

- South Thompson River using gill net for sockeye and chinook; and
- Little Shuswap Lake using gill net for sockeye and chinook.

The north side of the South Thompson River at the Neskonlith Indian reserve (outside the RSA) is a favoured salmon fishing place of the NIB. Traditionally the village at Neskonlith was known as Celewt. Many drying racks were once set up along the river as people speared salmon into the fall. Ice fishing was done in the winter months. Today the Neskonlith fish at night using spears and smoke the salmon the way it was done traditionally (Secwepemc Nation n.d.). McGillvary Creek, which runs through Sun Peaks Resort, was traditionally fished for Dolly Varden, though that no longer appears to be the case (Billy 2006).

Hunting and Trapping

Based on the review of publically available secondary source materials identified in Section 22.4.2, and YMI's consultation efforts with the NIB, the NIB have not identified current hunting or trapping areas within the Current Aboriginal Use LSA.

Plant Gathering

Based on the review of publically available secondary source materials identified in Section 22.4.2, and YMI's consultation efforts with the NIB, the NIB to date have not identified current gathering sites and areas within the Current Aboriginal Use LSA.

Use of Habitations, Trails, and Cultural Landscapes

Based on the review of publically available secondary source materials identified in Section 22.4.2, and YMI's consultation efforts with the NIB, the NIB have no habitations, trails, cultural or spiritual sites that are currently used within the Current Aboriginal Use LSA.

23.3.5 **Little Shuswap Indian Band**

23.3.5.1 *Governance*

LSIB is governed by a Band Council which consists of a Chief and two Councillors elected for a 4-year term. They have a custom electoral system (AANDC n.d.). LSIB is not affiliated with any tribal council or treaty group. It participates in independent discussions with the Government of British Columbia outside of the treaty process (S. Adamson, Pers. Comm., 2012).

23.3.5.2 *Population and Communities*

The LSIB (Skwlax) has five Indian reserves totalling 3,112.7 ha (AANDC n.d.; Table 23.3-4). Figure 23.1-4 identifies LSIB Indian reserves. Quaaout IR#1 on the north side of Little Shuswap Lake

adjacent to the villages of Chase and Sorrento, is the main community of the LSIB, with a population of 234, a 25.8% increase from 2006 (Statistics Canada 2012). As of May 2014, the LSIB had 337 registered members (AANDC n.d.); 30% of Little Shuswap Lake members live off-reserve.

Table 23.3-4. Little Shuswap Reserves and Infrastructure

Name	Location	Hectares
Quaaout Reserve #1	Kamloops District, all sections west 6 miles, between Shuswap and Little Shuswap Lakes, on right bank of the South Thompson River. Notable features: <ul style="list-style-type: none"> • 126 residents Infrastructure: <ul style="list-style-type: none"> • Band administration office • recreation centre • health centre • fire hall • water (some piped from reservoir, some community wells) • heat/hydro utilities • sewage (septic) and garbage facility 	1,726.0
Chum Creek Reserve #2	Kamloops District, Sections 9 and 15, TP.22, Range 12, west 6 miles, left bank of the South Thompson River at north end of Little Shuswap Lake. Notable features: <ul style="list-style-type: none"> • 24 residents 	195.7
Meadow Creek Reserve #3	Kamloops District in Section 25, TP.21, Range 12, west 6 miles, 1 mile east of Chum Lake, 1 mile north of Phillips Lake. Notable features: <ul style="list-style-type: none"> • no residents 	24.3
Scotch Creek Reserve #4	Kamloops District in Sections 28, 29, 31-33, TP.22, Range 11, Sections 3-5, TP.23, Range 11, west 6 miles on north shore of Shuswap Lake, north of Scotch Creek. Notable features: <ul style="list-style-type: none"> • no residents 	851.9
North Bay Reserve #5	Kamloops District in Sections 9, 10, 15, 16, TP>21, Range 10, west 6 miles on north shore of Salmon Arm of Shuswap Lake. Tappen Canadian Pacific station on the reserve. Notable features: <ul style="list-style-type: none"> • 36 residents 	314.8

Source: Aboriginal Canada Portal (2011), Adamson (2012)

23.3.5.3 Education, Skills and Training

In 2011, forty-six percent of residents aged 15 and over had obtained some kind of post-secondary certificate, diploma or degree compared to the provincial average of 55%. About 19% of residents aged 15 and over had obtained an apprenticeship or trades certificate or diploma, almost double that of the Province as a whole (Statistics Canada 2013).

23.3.5.4 *Economic Development*

LSIB describe themselves as an economic development driven community, striving to be leaders in Aboriginal tourism. LSIB own the Quaaout Lodge and Spa and the Talking Rock Golf Course on the north shore of Little Shuswap Lake. The lodge features a restaurant as well as conference rooms for hosting conventions. The band also owns the Skwlax Centre which includes social housing, commercial space, and a gas station. LSIB also possess an industrial park with spaces available for leasing (LSIB n.d.).

23.3.5.5 *Employment*

Residents of Quaaout IR#1 had a labour force participation rate of 56.8% in 2011 compared to the provincial median of 65%. The unemployment rate was 19% compared to the provincial rate of 7.8%. Thirty-five percent of the labour force was employed in accommodation and food services. Trades and natural resource-related occupations employed 37% of the labour force (Statistics Canada 2013).

23.3.5.6 *Health and Social Services*

The majority of health care services are obtained in Kamloops. The Skwlax Wellness Centre provides health, social development and employment services to LSIB members. The centre employs a public health nurse and personal care aide, a youth and family worker and a social worker. It sponsors community health programs, employment counseling and referral, and hosts short-term training programs (LSIB n.d.). A physiologist provides services at the Wellness Centre four days per month; a nurse practitioner and dentist are also on site one day every two weeks. The Skwlax Daycare, attached to the Wellness Centre, provides child care services to band members (LSIB n.d.).

23.3.5.7 *Emergency Services*

LSIB retains its own Volunteer Fire Department. Policing services for the LSIB are provided by the RCMP detachments at Chase and Salmon Arm. Ambulance service is also provided out of Chase.

23.3.5.8 *Language and Culture*

The LSIB speak Secwepemctsin. In a 2014 survey, only 1.6% of surveyed band members spoke Secwepemctsin fluently, while about 6.5% understood and spoke the language, and another 17% were described as “learning speakers” (FPHLCC n.d.).

23.3.5.9 *Current Use of Lands and Resources for Traditional Purposes*

Fishing

Based on Schedule G-1 of the Comprehensive Fisheries Agreement (2008), LSIB current fishing locations include:

- Little Shuswap Lake and Little River using a gill net for sockeye and chinook; and
- Scotch Creek with the aid of a sockeye counting fence.

Shuswap Lake abounds with Rainbow Trout, Dolly Varden, Bull Trout, Kokanee, Pacific Salmon, whitefish, Ling Cod, and Lake Trout. In the fall, Sockeye Salmon can be taken using various traditional methods. The LSIB Fisheries Crew distributes the annual catch to the band members who keep the fish fresh, or preserve it by freezing, canning or smoking. LSIB issues fishing permits to its own members (LSIB n.d.).

Based on the review of publically available secondary source materials identified in Section 22.4.2, and YMI's consultation efforts with the LSIB, the LSIB have not identified current fishing sites or areas within the Current Aboriginal Use LSA.

Hunting, Trapping, Gathering, and Use of Habitations, Trails and Cultural Landscapes

Based on the review of publically available secondary source materials identified in Section 22.4.2, and YMI's consultation efforts with the LSIB, the LSIB have not identified hunting, trapping and gathering sites and areas, and use of habitations, trails, cultural and spiritual areas within the Current Aboriginal Use LSA.

23.3.6 Métis Nation BC

23.3.6.1 Governance

MNBC is the governing body in British Columbia recognized by the Métis National Council. MNBC was created in 1996 and formally incorporated as the Métis Provincial Council of British Columbia. In 2003, the MNBC Constitution was ratified, thereby establishing a new Métis Nation governance structure (MNBC 2014). The relevant MNBC regional government council for the proposed Project area is that of Region 3 (Thompson/Okanagan). The MNBC represents 34 Métis Chartered Communities in British Columbia and is "mandated to develop and enhance opportunities for Métis communities by implementing culturally relevant social and economic programs and services" (MNBC 2014). To qualify as a Métis Chartered Community, the community must have at least 25 Métis citizens who are over 18 years of age.

In May 2006, the Province of BC and MNBC signed the Métis Nation Relationship Accord (the Accord). The Accord formalized the relationship between the Province and the Métis people of British Columbia, identifying mutual goals to close the gap in quality of life between Métis people and other British Columbians (BC MARR 2006). The Accord commits the provincial government to support MNBC's health care, housing, education, and employment initiatives, which are intended to improve the life circumstances of Métis people. However, both the federal and provincial governments contribute to MNBC's finances (Barman and Evans 2009).

MNBC provides services to its communities, including programming related to children and families, culture, economic development, education, employment and training, health, natural resources, sport, veterans, women, and youth (MNBC 2014).

23.3.6.2 Population and Communities

There are two Métis Chartered Communities near the Project: in Kamloops (Two Rivers Métis Society) and in Salmon Arm (Salmon Arm Métis Association; MNBC 2014). Based on 2011 Census

data, there are 3,685 Métis residing in the Thompson Nicola Regional District (TNRD), including 2,925 Métis within the Kamloops Census Agglomeration (CA) and 530 within the Salmon Arm CA (Statistics Canada 2013).

23.3.6.3 *Land and Resource Management*

The *Natural Resources Act* (Revised 2010) of MNBC allows harvesting of fish and wildlife for food, social, ceremonial, and traditional (but not commercial) purposes. To harvest for these purposes, MNBC harvesting cards can be applied for by Métis citizens. MNBC harvesting cards apply only to species, areas, and times of year, as described by regulations developed by the BC Métis Assembly of Natural Resources. Currently, harvesting cards only replace the Canadian Migratory Bird license; they do not, on their own, authorize freshwater fishing, saltwater fishing, hunting (other than migratory birds), cutting timber, or trapping (MNBC 2014).

23.3.6.4 *Education, Skills Development, and Training*

Just over half (51.2%) of Métis adult respondents to the 2006 Métis Nation Provincial Survey (MNPS) had at least a high school education, with 21% having a college education. Only 7% of Métis respondents had completed a university education (BC Provincial Health Officer 2009). In 2006, 14.4% of Métis in BC had an apprenticeship or trades certificate, compared to 10.8% of the non-Aboriginal population in the Province (BC MARR 2010-2011). Eighty percent of Métis youth surveyed in the MNPS considered education and training to be the most important issue to them (BC Provincial Health Officer 2009). MNBC administers the Métis Employment and Training Program to improve the employment potential, earning capacity and self-sufficiency of Métis people in BC (MNBC 2014).

23.3.6.5 *Employment and Income*

In 2006, the unemployment rate for Métis people in BC was 9.4%, compared to 5.6% for the non-Aboriginal population.

23.3.6.6 *Language*

The language spoken by Métis in BC is typically English, though the traditional Métis language is Michif. The MNPS from 2006 reported that less than 5% of the Métis population surveyed speak Michif themselves; almost 15% indicated that Michif was spoken by someone in their home. Despite the fact that the language is not widely spoken, over two-thirds of the respondents indicated that they were interested in learning Michif (BC Provincial Health Officer 2009).

23.3.6.7 *Current Use of Lands and Resources for Traditional Purposes*

Within the Thompson-Okanagan region, MNBC have identified historic and traditional pursuits that include subsistence harvesting and trapping (Letter from MNBC to HCMC, December 22, 2011; [Appendix 23-D](#)). HCMC has reviewed information on the MNBC website and asked MNBC for specific information on how the Project may impact their Aboriginal interests. At the time of submission of the Application/EIS no information has been received.

Review of available secondary source materials did not identify any current fishing, hunting, trapping, or gathering sites or areas, or current use of habitations, trails, cultural or spiritual sites by MNBC within the Current Aboriginal Use LSA.

23.4 SUMMARY OF CONSULTATION ACTIVITIES

This section provides a summary of past and planned consultation activities by YMI with the SFN, ALIB, NIB, LSIB, and MNBC. The full record of YMI's engagement with Aboriginal groups is located in [Appendix 3-E](#) of Chapter 3 (Information Distribution and Consultation). First Nations consultation in relation to the Project has been conducted by YMI on behalf of HCMC, a wholly owned subsidiary of YMI. Aboriginal consultation has been guided by:

- the requirements set out in the BC EAO section 11 and 13 Orders issued for the Project;
- the Project Application Information Requirements (AIR; October 2011);
- requests from Aboriginal groups; and
- direction provided by the BC EAO and CEA Agency.

23.4.1 YMI's Approach to Consultations

YMI initiated consultations with Aboriginal groups in 2006 and 2007⁵, prior to formally entering the environmental assessment (EA) process in September 2008.⁶ YMI's consultation efforts have evolved over time as more information became available about the potentially affected First Nations, the nature of their asserted rights, and their desired modes of consultation. Based on early discussions with local First Nations in the area, YMI understood that the Project was located within the Shuswap Nation and the traditional territory of the SFN (Figure 23.1-3). On September 11, 2009 the BC EAO directed YMI, in the section 11 Order, to engage and consult with the SFN and ALIB. YMI focused its consultation efforts on these groups as directed by the Order. In addition SFN provided YMI with the TLU & EKS ([Appendix 22-A](#)). Based on this information, YMI understands the SFN to be the primary First Nation, with respect to the potential for adverse effects on Aboriginal rights and related interests in relation to the Project.

On October 15, 2012 the BC EAO issued a section 13 Order amending the section 11 Order for the Project, which directed YMI to engage and consult with the NIB and LSIB. Prior to October 2012, communications and consultation with these groups was on an information-sharing basis as directed by the BC EAO and CEA Agency. In addition, it was YMI's understanding from several meetings and written correspondence from both the ALIB and the NIB between April 2011 and August 2012, that the ALIB was representing the interests of the Neskonlith and the Splots'in Indian Bands in the EA process for the Project. At a September 18, 2012 meeting, the NIB informed YMI that going forward during the pre-Application stage, NIB would be self-represented. YMI adjusted its communications accordingly.

⁵ The exception is consultation with the Métis Nation BC (MNBC), whom YMI first engaged in early 2012.

⁶ Consultation was suspended between early 2009 until late 2010 when the Project was put on hold. Consultation activities resumed in early 2011 when the BC Environmental Assessment Office (BC EAO) and Canadian Environmental Assessment Agency (CEA Agency) accepted the updated Project Description.

The Project is located in an area of interest to the MNBC, who have provided YMI with information on their historical ties to the area. In a December 22, 2011 letter to YMI ([Appendix 23-D](#)), the MNBC noted historical use of the region, including communities such as Kamloops, Barriere, Little Fort and Tete Jaune Cache. Today, the area continues to support a large Métis community and active sustenance harvesting by Métis people (MNBC 2010; MNBC 2014). YMI initiated consultation with the MNBC in January 2012. YMI understands the CEA Agency is the Crown agency responsible for coordinating consultation related to potential impacts of the Project on Métis rights (YMI 2012a).

23.4.2 YMI Consultation Principles

YMI is committed to continued and active engagement with Aboriginal groups to identify any potential adverse environmental, economic, social, health or heritage effects on Aboriginal rights and interests related to the Project. YMI's objectives in undertaking Aboriginal consultation include the following:

- to provide local First Nations with opportunities to provide input on the proposed Project;
- to consult with the First Nations identified in the section 11 and 13 Orders to share information about the Project;
- to consult with First Nations to obtain information on their use of the Project area;
- to consult with First Nations on proposed measures to address potential impacts on Aboriginal rights and interests identified by First Nations; and
- to ensure the Project is developed in a way that respects the interests of potentially affected First Nations.

23.4.3 EA Working Group

The BC EAO established the Harper Creek Project Working Group in 2011 and invited representatives of First Nations listed in the section 11 Order (SFN and ALIB), and local, provincial, and federal government agencies to be members. Following the BC EAO's issuance of the section 13 Order, BC EAO invited the LSIB and NIB to join the Working Group (October 2012).

During the pre-Application stage, the BC EAO and CEA Agency held working group meetings on April 7, 2011; August 17-18, 2011; May 14-15, 2012; November 1, 2012; and September 17, 2014. YMI attended the meetings to provide information on the Project, baseline studies, and the effects assessment, and respond to questions. These meetings are discussed in Section 3.5.1 of Chapter 3, Information Distribution and Consultation.

23.4.1 Working Tables

In May 2013, the BC EAO requested YMI conduct additional consultation with Aboriginal groups to obtain information: on past and current Aboriginal interests in the vicinity of or in relation to the area of the Project; potential impacts of the proposed Project on those Aboriginal interests; and measures that could be used in the proposed Project's design or operation to avoid, mitigate, or otherwise address those potential impacts. In response to this request, YMI prepared and distributed a set of eight Working Tables to the SFN, ALIB, NIB and LSIB in July 2013 to engage on the

identification of potential Project impacts on their Aboriginal Interests and YMI's proposed mitigation measures.

Simpcw First Nation

In October 2010, YMI and the SFN signed a Negotiation Agreement and a Letter of Engagement that included funding for technical experts, a skills assessment, and a Traditional Use Study. Capacity funding has been offered to the SFN on several occasions, including funding to participate in the EA process and review key documents [e.g., the AIR, the Application (2013), and the AOA for powerline route options (2014)]; participate in baseline studies; provide traditional use information; review consultation documents including the Aboriginal consultation summary and plan in December 2012, Working Tables in 2013 (see Section 3.5.1.9 of Chapter 3, Information Distribution and Consultation) and a work program for the EA review process in 2014.

Adams Lake Indian Band

YMI and the ALIB signed a Memorandum of Understanding in April 2013 which provided capacity funding for the ALIB to work in collaboration with the SFN; participate in the EA process; and provide YMI with information on potential impacts of the Project on ALIB interests.

YMI wrote to ALIB offering additional capacity funding in July 2013. The capacity funding was to support ALIB's review of the Working Tables (see Section 3.5.1.9 of Chapter 3, Information Distribution and Consultation) to assist with the identification of potential effects of the Project on ALIB's Aboriginal interests.

On May 21, 2014, YMI wrote to the ALIB and provided a copy of the Archaeological Overview Assessment (AOA) report and offered to provide funding to review the report. On May 30, 2014, YMI wrote to the ALIB to discuss a proposed work program and offered to provide additional capacity funding during the EA review phase to undertake a technical review of the Application, and provide information on cultural and traditional uses to be included in the Application/EIS.

Neskonlith Indian Band

Throughout the EA process, YMI offered capacity funding on a number of occasions to NIB to support their review of key EA documents. In September 2012, YMI offered capacity funding to NIB to provide review comments on a draft socio-economic baseline report. YMI offered capacity funding in December 2012 to review the Aboriginal Consultation Plan. On May 30, 2013, YMI sent a letter to NIB requesting a meeting with Chief and Council to engage in further consultation and offered to provide capacity funding to support NIB's review of the Working Tables (see Section 3.5.1.9 of Chapter 3, Information Distribution and Consultation) and to assist with the identification of potential effects of the Project on NIB's interests. Capacity funding was also offered to the NIB in May 2014 to review the AOA report. YMI met with NIB in June 2014 to discuss a program of work for the EA review phase and offered to provide additional capacity funding to undertake a technical review of the Application, and provide information on cultural and traditional uses to be included in the Application/EIS. NIB provided comments on the First Nations Consultation Summary and Planned Application Review Consultation plan, and provided initial comments on the NIB Socio-economic Baseline report in November 2012. NIB provided additional

comments on the NIB Socio-economic Baseline Report in December 2013. YMI has incorporated all comments and input in the report. The NIB has accepted funding offered by YMI to date, and provided feedback on all documents except for the Work Program for the EA review phase.

Little Shuswap Indian Band

Throughout the EA process, YMI has offered capacity funding to the LSIB to review key EA documents. YMI offered provide capacity funding to the LSIB in January 2013 to support the review of the draft socio-economic baseline report. YMI sent letters to LSIB offering capacity funding ([Appendix 3-G](#)) to support LSIB's review of the Working Tables (see Section 3.5.1.9 of Chapter 3, Information Distribution and Consultation), to assist with the identification of potential effects of the Project on LSIB's interests, YMI also offered capacity funding to the LSIB to review the AOA report (May 2014), and to support the participation of LSIB in a work program for the Application review stage (May 2014). The LSIB has accepted funding offered by YMI to date, and provided feedback on all documents except for the work program for the EA review phase.

23.4.2 Consultation Activities

YMI first met with the SFN in June 2006 and ALIB, NIB and LSIB (separately) in late 2007 to introduce the Project and meet with the leadership of each group. These meetings occurred prior to YMI formally entering the provincial and federal EA processes on September 18, 2008 when the BC EAO issued the section 10 Order under the BC *Environmental Assessment Act* (2002).

YMI engagement activities with First Nations during the pre-Application stage included meetings, site visits, correspondence, information distribution, and First Nations' participation in environmental baseline studies. YMI also attended BC EAO Working Group meetings to provide information relating to the Project. The purpose of YMI's engagement activities was to provide Aboriginal groups with the information they require to determine if and how the Project may affect their Aboriginal rights and related interests, and to provide Aboriginal groups with the opportunity to share information about their Aboriginal rights and related interests as they relate to the Project. They were also intended to provide First Nations with the opportunity to identify issues and concerns about the Project, and discuss potential mitigation and accommodation measures.

Consultation with the MNBC by YMI has focused on opportunities to provide information on traditional knowledge and traditional use in relation to the Project, and providing Project updates and information. YMI will continue to communicate and provide opportunities for the MNBC to provide information regarding concerns or potential impacts on their interests during the Application/EIS review stage.

Issues identified by Aboriginal groups during consultations and YMI's responses to the issues are identified in [Appendix 3-F](#). The issues were compiled from meetings and correspondence with YMI and the Working Group, comments on the draft AIR (MNBC only),⁷ the Working Tables, and other

⁷ SFN and ALIB (on behalf of the Lakes Division) comments on the draft AIR and YMI's responses are included in tracking tables posted to the BC EAO e-PIC site, whereas MNBC's comments were not included in these tables. Hence, the issues raised by MNBC are included in the issues tracking table appended to this chapter, which includes YMI's responses.

EA documents and reports (see Section 3.5 of Chapter 3, Information Distribution and Consultation). To date, issues have been raised in the following general areas:

- Aboriginal rights and interests;
- access and transportation;
- accidents and malfunctions;
- air quality;
- archaeology and heritage;
- closure and reclamation;
- consultation;
- cumulative effects;
- EA process and methodology;
- effects of the environment on the Project;
- employment, training, and economic opportunities;
- Environmental Management Plans;
- fish and fish habitat;
- human health and country foods;
- land use;
- Project design;
- socio-economic;
- tailings management;
- terrestrial ecosystems and vegetation;
- traditional knowledge and use;
- water quality and aquatic resources; and
- wildlife and wildlife habitat.

23.4.3 Incorporation of Aboriginal Traditional Knowledge

The integration of community and Aboriginal Traditional Knowledge (TK) is an important consideration during the EA planning process. Communication and cooperation with local Aboriginal groups, is required to ensure Project impacts on potential or established Aboriginal rights, and related interests in the Project area, are minimized to the extent possible.

The BC EAO does not currently provide guidance with regards to the incorporation of TK into an Application. Under the CEAA (1992) the consideration of Aboriginal TK (s.16(1)) may help to meet one of the expressed purposes of the Act which is to promote communication and cooperation with Aboriginal peoples during an environmental assessment (s.4(1)(b.3)). Towards this objective, the

CEA Agency has produced an Operational Policy Statement entitled *Considering Aboriginal Traditional Knowledge in Environmental Assessments Conducted under the Canadian Environmental Assessment Act – Interim Principles* (CEA Agency 2010). In it, they state that TK can assist with:

- scoping the project and the assessment;
- the collection of baseline information;
- consideration of the environmental effects of a project;
- evaluation of environmental effects and the determination of their significance;
- evaluation of any cumulative environmental effects of the project;
- evaluation of the effects of the environment on the project;
- identification or modification of mitigation measures; and
- the design and implementation of any follow-up programs.

The extent to which TK informs the above depends both on the efforts of the proponent to collect the data, and the willingness of the Aboriginal groups to share this information. It also depends on the amount of information collected and on the relevance of the information to the location being studied.

Traditional knowledge and scientific (or empirical, commonly referred to as “western”) knowledge can complement one another. In many situations, western and traditional knowledge systems will be complimentary in the insights that they can provide to EA practitioners, and thus they can be reconciled with one another in the EA. Where they cannot be reconciled, the CEA Agency advises that EA practitioners juxtapose what is suggested by each knowledge system in the Application, demonstrate how they have considered each in their EA, and how each type of knowledge has been considered in the EA (CEA Agency 2010).

Traditional use/traditional knowledge has guided the scoping of valued components (VCs) for the effects assessment. Feedback on VCs from Aboriginal groups, as well as government agencies and the public, is summarized in tables in each effects assessment chapter along with a response from the proponent. For example in Table 15.3-1, the Simpcw raised concerns about the loss of availability and access to traditional use plants. The lists of plants provided by Simpcw and ALIB were reviewed by a botanist to determine whether the species listed were: not expected to be impacted by the Project; common throughout the LSA; introduced species; or do not occur in the area (Section 15.3.1.3). Based on this review, it was determined that the traditional use plants will have a negligible interaction with the Project. Therefore these plants were excluded from the effects assessment.

The lists provided by Simpcw and ALIB influenced the determination of wildlife VCs to be included in the effects assessment (Chapter 16, Section 16.3.1.2). For example the Great Blue Heron (*Ardea Herodias*) is identified on the ALIB list. This species was considered as a potential VC during baseline studies ([Appendix 15-A](#)) but excluded from the effects assessment because no herons or heron nests were observed in the Wildlife LSA, and no suitable heron nesting habitat will be affected by the Project (Table 16.3-4).

Similarly, fish species of importance to the Simpcw were considered when determining fish VCs (Chapter 14, Section 14.3.1.2). Simpcw expressed concern regarding the potential for effects on fish species (especially Bull Trout, *Salvelinus confluentus*) due to changes in temperature and reduced flows, and the potential for fish to adjust to these changes. They also requested information about baseline monitoring and the lethal sampling of fish in Harper Creek, and if interactions between the migratory Bull Trout population in North Barrière Lake and the resident population in upper Harper Creek had been observed. SFN expressed concern about potential effects to salmon fisheries in the Project area.

The involvement of SFN and ALIB members in the Archaeological Impact Assessment (AIA) for the Project Site, allowed for the consideration of traditional land uses and increased the knowledge and predictive capacity of archaeologists to determine where archaeological sites may be located.

23.4.4 Planned Aboriginal Consultation during the Application Review Stage

The proposed plan for consultation with Aboriginal groups during the Application/EIS review stage is intended to meet the requirements of the BC EAO section 11 and section 13 orders. During the Application/EIS review stage, HCMC will:

- provide copies of the Application to SFN, ALIB, NIB, and LSIB for information and consultation purposes, in order that they may submit comments on the Application;
- notify SFN, ALIB, NIB, LSIB, and MNBC about the public comment period, within the time limits set by the BC EAO;
- by mutual agreement, hold an open house for SFN, and community members, in a location recommended by them;
- by mutual agreement, hold an open house for NIB, ALIB, LSIB, and community members, in Quaaout or Chase;
- by mutual agreement, hold an open house for each of NIB, ALIB, and LSIB, and their respective community members, in a location recommended by them;
- invite MNBC and members to open houses held during this period;
- provide written responses to comments received from Aboriginal groups on the Application within the timeframe specified by the BC EAO;
- attend EA Working Group meetings organized by the BC EAO to provide information related to the Application and to respond to questions on the Application;
- by mutual agreement hold discussions with SFN, ALIB, NIB, and LSIB to discuss potential effects of the proposed Project on SFN Aboriginal interests and proposals to avoid, mitigate, or otherwise address the effects as appropriate;
- discuss the potential to collaborate on a skills assessment and capacity building initiatives for ALIB, SFN, NIB, and LSIB;
- review and consider Aboriginal groups' comments during the Application review stage;
- compile, track, and, where possible, address issues raised by Aboriginal groups during engagement activities, including attempting to resolve any outstanding issues;

- provide the BC EAO with a report on the results of First Nations consultation activities, identifying issues and concerns raised by First Nations with respect to the potential adverse effects on Aboriginal interests and how these issues and concerns will be addressed;
- consider other means of engagement brought forward by Aboriginal groups, if applicable; and
- undertake further engagement with Aboriginal groups as directed by the BC EAO and/or CEA Agency.

Based on issues and concerns raised by Aboriginal groups during the Application/EIS review stage, and based on input from Aboriginal groups, HCMC will consider other measures to respond to issues and concerns raised by these groups. The following section outlines HCMC's understanding of Aboriginal rights and related interests as identified through engagement with Aboriginal groups and research activities.

23.5 ASSESSMENT OF EFFECTS TO ABORIGINAL RIGHTS

23.5.1 Assessment Methods

Potential adverse effects of the Project on Aboriginal rights (i.e., practices, traditions, and customs) have been assessed by adapting the assessment methodology framework described in Chapter 8 (Effects Assessment Methodology). The methods follow three general steps described below.

The first step is to conduct a scoping exercise to screen which potential effects should be considered in the Aboriginal rights assessment. Both indirect and direct potential effects of the Project are considered for Valued Components (VCs) that are connected to an Aboriginal right. Scoping also includes selecting the boundaries (spatial, temporal, etc.) to support the assessment, and considering the issues, interests and concerns raised by the Aboriginal groups during consultations.

The second step involves characterizing the impact of the Project on Aboriginal rights using criteria described in the CEA Agency's document *A Reference Guide for the Canadian Environmental Assessment Act – Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects* (1994).

The following criteria are considered:

- *magnitude* (i.e., severity) of Project and cumulative residual effects and resulting impact on the exercise of rights;
- *geographic extent* of residual effects and overlap with traditional territories;
- *duration* of residual effects on a VC and length of time the right(s) is/are anticipated to be at risk of infringement;
- *frequency* of the residual effect;
- *reversibility* (i.e., are residual effects on a VC that impact the exercise of Aboriginal rights reversible in the short, medium, or long-term, or are they permanent); and
- *resiliency* of the resource or cultural site reflects its level of importance to an Aboriginal group and whether there are similar sites of importance available in their asserted territory.

The third and final step is to evaluate whether Project and cumulative residual effects have a negligible, minor, moderate, or high impact on Aboriginal rights; this is derived by considering the following elements:

- *Does the Project adversely affect culturally important resources (e.g., fish, wildlife, plants, traditional sites)?*
- *If so, will the ability to exercise rights be unaffected, modified, or completely restricted?*
- *Will the Project result in a long-term displacement to access or use parts of an asserted traditional territory?*

23.5.2 Scoping the Aboriginal Rights Assessment

23.5.2.1 Linkages between Issues and Valued Components

Issues raised during consultation activities are presented below in Table 23.5-1. Concerns around effects on a number of VCs have been expressed, including the key issues summarized as:

- **Surface water quantity:** changes to water quantity on fish and aquatic habitat, due to a reduction in Harper, Baker, and Jones creeks flows. The Project Site itself is non-fish bearing;
- **Fish and fish habitat:** effects of construction of the TMF on downstream fish and aquatic habitat resulting in a loss of fish habitat and reduced Bull trout productivity;
- **Air quality:** effects of fugitive dust deposition on aquatic and plant habitat, and possible contamination of country foods;
- **Wildlife:** habitat alteration and potential displacement of wildlife due to sensory disturbance (noise, traffic);
- **Cultural heritage:** potential for impacts on access to, and practices within, culturally valuable areas impacted by mining operations (e.g., loss of rock cairns in the TMF); and
- **Current use of land for traditional purposes:** potential impacts on trapping, hunting, fishing and berry-picking areas and other traditional use sites located within the Project area.

Table 23.5-1. Issues Raised by Aboriginal Groups related to Valued Components

Issues Raised by Aboriginal Groups	Valued Component Affected
Barrière and North Thompson Rivers are very important fisheries.	Fish Aquatic Habitat
Effects of airborne dust.	Air Quality
Effects from dust from the waste rock piles on North Thompson Valley air quality.	Air Quality
Effects of contaminated air and water on the environment in the vicinity of the Project.	Air Quality
Effect of temperature and reduced flows on Bull trout.	Fish and Aquatic Resources
Habitat compensation for habitat lost due to the Project and proposed off-channel rearing habitats.	Fish and Aquatic Resources

(continued)

Table 23.5-1. Issues Raised by Aboriginal Groups related to Valued Components (continued)

Issues Raised by Aboriginal Groups	Valued Component Affected
Effects on salmon fisheries.	Fish and Aquatic Resources
Impacts on archaeological sites.	Archaeology
Mitigation measures for two rock cairns within at the Project Site.	Archaeology
Subsurface aquifers in the vicinity of the tailings pond and open pit may allow water from the tailings pond or open pit to enter underground aquifers or groundwater.	Ground water quality
Water in the tailings pond may seep into nearby waterways.	Ground water quality
Potential effects on downstream water quantity and quality.	Surface water quality
	Ground water quality
Water from the tailings pond or open pit may enter and distribute within the North Thompson Valley watershed.	Surface water quality
	Ground water quality
Effects of a population increase on hunting and fishing.	Current Use of Lands and Resources for Traditional Purposes
Socio-economic and cultural effects on First Nations' communities.	Community Growth
	Community Health and Well-being
Mitigation to address impacts to health and well-being.	Community Health and Well-being
Effects on hunting.	Current Use of Lands and Resources for Traditional Purposes
Effects on food procurement areas and fish-bearing waterbodies and potential effects on SFN health and well-being.	Current Use of Lands and Resources for Traditional Purposes
Effects on access to traditional use sites.	Current Use of Lands and Resources for Traditional Purposes
Effects on transportation corridors including trails, creeks, and rivers.	Current Use of Lands and Resources for Traditional Purposes
Mitigation to manage effects on traditional use sites (identified in the 2012 SFN TLU and EKS).	Current Use of Lands and Resources for Traditional Purposes
Impacts on culturally important areas, wildlife, plants, birds and fish species.	Vegetation (various)
	Wildlife (various)
	Fish
Impacts on SFN's ability to practice their traditional livelihood, health and well-being, cultural practices, and trade networks.	Current Use of Lands and Resources for Traditional Purposes
	Community health and well-being
SFN has traditional use areas in the LSA and downstream of the Project.	Current Use of Lands and Resources for Traditional Purposes
Chemical composition of materials in waste rock piles may affect plants, wildlife, birds, fish, insects, and/or humans coming into contact with it or ingesting it.	Vegetation (various)
	Wildlife (various)
	Fish
	Human Health (Country Foods Quality)
Habitat loss due to Project infrastructure and waste rock piles.	Vegetation (Various)
Water quality in Harper Creek and Baker Creek after receiving discharged water from the TMF and open pit.	Surface water quality

(continued)

Table 23.5-1. Issues Raised by Aboriginal Groups related to Valued Components (continued)

Issues Raised by Aboriginal Groups	Valued Component Affected
Potential impacts of mining activities within the mine footprint, downstream effects (e.g., contaminant seepage).	Surface water quality
Potential effects of the rail loadout on the sensitive shoreline of the North Thompson River between Clearwater and Vavenby.	Fish Aquatic Habitat
Effect of silt in waterways.	Surface Water Quality
Water in the tailings pond may affect plants, wildlife, birds, fish, insects, and/or humans coming into contact with it or ingesting it.	Surface Water Quality
Effects on wildlife, aquatic life and plants.	Vegetation (various) Wildlife (various) Fish Human Health (Country Foods Quality)
Effects of human activity and refuse on wildlife.	Wildlife (Various)
Potential impacts and risks to species in the area.	Wildlife (Various)
Effects on wildlife and wildlife habitat.	Wildlife (Various)
Effects of blasting on wildlife.	Wildlife (Various)
Effects on caribou.	Mountain caribou
Consideration of local knowledge in country foods related to fish and consumption rates.	Human Health (Country Foods)
ALIB Issues	
What effects will the construction of roads and the power line associated with the Project have on fish and aquatic habitats?	Fish Aquatic Habitat
Fish distribution and methods of determining which waterbodies are fishless.	Fish Aquatic Habitat
Effects on forestry.	Commercial Interests
Tailings seepage into the stream.	Surface water quality; groundwater quality
Concerned about downstream effects of the Project as it drains south into Harper Creek and beyond.	Surface water quality
Effects on caribou and grizzly bear.	Mountain caribou Grizzly bear
Effects of dust on wildlife.	Wildlife (Various)
Effects of noise and light wildlife.	Wildlife (Various)
NIB Issues	
Impacts to air quality and noise from operations has the potential to disturb wildlife on and adjacent to the mine site.	Wildlife (Various)
Impacts of the Project on cultural and archaeological sites or landforms.	Archaeology
Impacts from operations have the potential to significantly impact fish and fish habitat, in particular in the Harper Creek watershed and the Barrière River system.	Fish Aquatic Habitat
Impacts on access to and practices within culturally important areas that may be impacted by the Project.	Current Use of Lands and Resources for Traditional Purposes

(continued)

Table 23.5-1. Issues Raised by Aboriginal Groups related to Valued Components (completed)

Issues Raised by Aboriginal Groups	Valued Component Affected
NIB Issues (cont'd)	
<p>Impacts to community socio-economic development.</p> <p>Vegetation.</p> <p>Effects of ML/ARD on water quality.</p> <p>Impacts of operations wildlife and wildlife habitat.</p>	<p>Community Growth Community Health and Well-being</p> <p>Surface water quality</p> <p>Wildlife (Various)</p>
LSIB Issues	
<p>Dust and air-borne particulate matter affecting downstream/ downwind air quality.</p>	<p>Air Quality Noise</p>
<p>Noise disturbance wildlife during mating and birthing seasons.</p>	<p>Wildlife (Various)</p>
<p>Concern that the purpose of cairns identified in the AIA is unknown. It is important to resolve the function of the two cairns.</p>	<p>Archaeology and Heritage</p>
<p>Potential effects to fish and fish habitat in Harper Creek and its confluence to Barrière Lake.</p>	<p>Fish Aquatic Habitat</p>
<p>Access to fish and fish bearing streams including maintenance of sufficient flows and access for fish throughout mine life.</p>	<p>Current Use of Lands and Resources for Traditional Purposes</p>
<p>Curtailed access to sites during operation; status of access (e.g., to hunt and gather) post-closure.</p>	<p>Fish Aquatic Habitat</p>
<p>Water quality and potential downstream effects.</p>	<p>Current Use of Lands and Resources for Traditional Purposes</p>
<p>Concern about recycling non-potentially acid generating (PAG) rock downstream of stockpiles due to potential water quality contamination.</p>	<p>Ground water quality Surface water quality</p>
<p>Maintenance of sufficient water flows to creeks downstream.</p>	<p>Ground water quality Surface water quality</p>
<p>Excess noise disturbing wildlife, especially during mating and birthing. Sound dampening controls in major process areas to mitigate this.</p>	<p>Surface water quantity</p>
<p>Concern regarding the road down into open pit for a wildlife escape route.</p>	<p>Noise Wildlife (Various)</p>
<p>Concern regarding the road down into open pit for a wildlife escape route.</p>	<p>Wildlife (Various)</p>
<p>Increase in mine traffic impeding/ disrupting wildlife movement. Alternate access around site for hunting purposes and road closures to effectively eliminate unauthorized hunting.</p>	<p>Current Use of Lands and Resources for Traditional Purposes Wildlife (Various)</p>
MNBC Issue	
<p>Protection of Aboriginal rights and title, including traditional land use.</p>	<p>Current Use of Lands and Resources for Traditional Purposes</p>
<p>Effects of the Project on other land uses.</p>	<p>Commercial Interests Public Recreation Navigation</p>
<p>Effects on forestry and natural habitat.</p>	<p>Commercial Interest Old growth forest</p>
<p>Effects of the Project on wildlife.</p>	<p>Wildlife (Various)</p>

23.5.2.2 *Linkages between Valued Components and Aboriginal Rights*

The potential effects of the Project on selected VCs that may impact an Aboriginal right to hunt, trap, fish, or gather culturally important resources is the focus of this assessment and are identified in Table 23.5-1. VCs with residual effects that are not linked to an Aboriginal right are scoped out of the assessment. Some effects on a VC were deemed not residual with the appropriate implementation of mitigation measures and are also scoped out of the assessment.

Related to fish resources, the following potential effects were eliminated from further consideration:

- direct mortality on fish as a result of increased fishing pressure from mine personnel;
- effects on fish and fish habitat due to a change in water quality resulting from erosion and sedimentation; and
- effects on fish due to a change in water resulting from atmospheric deposition of dust or other pollutants.

For wildlife resources, the following potential effects were scoped out of the assessment because they were deemed not residual:

- effects on fisher and wolverine due to habitat alteration, disturbance and displacement, and mortality; and
- effects on grizzly bear, mountain caribou and mule deer due to habitat alteration, disturbance and displacement, mortality.

For vegetation (gathering) resources, the following potential effects were scoped out of the assessment because they were deemed not residual:

- Effects on current Aboriginal use due to a change in abundance and distribution of resources (culturally important plants); and
- Effects on current Aboriginal use due to a change in resource quality.

Table 23.5-2 includes both Project and cumulative residual effects that may link to an Aboriginal right. There is a potential for adverse effects on Aboriginal rights when there is a negative interaction between the Project and resources (fish, wildlife, plants, traditional sites) that are essential to the exercise of the Aboriginal right. An impact on Aboriginal rights may also be experienced if access to a rights-based resource is affected.

In considering the activities linked to an Aboriginal right (e.g., fishing, hunting and trapping, gathering), it is assumed that each Aboriginal group may practice their rights anywhere in their asserted territory. For the Simpcw First Nation, the asserted traditional territory overlaps with the Project footprint and is shown in Figure 23.1-3. For ALIB, NIB, and LSIB, Figure 23.1-2 shows the boundaries of the historical Shuswap Lakes Division; the Project footprint is outside of the Lakes division boundary. However, the Lakes Division members also identify interests in the Neskonlith Douglas Claim Reserve area, a few kilometres south of the Project Site (Figure 23.1-4).

Table 23.5-2. Links between Aboriginal Rights, VCs, Effects, Mitigation, and Significance Conclusions in the Application/EIS

Valued Component	Potential Effect	Mitigation / Accommodation	Residual Effects		Rights Assessed	Scoped into Rights Assessment (Y/N)
			Project Only	Cumulative		
Fish and Fish Habitat	Change in Surface water quantity	Site Water Management Plan (Section 24.13); Sediment and Erosion Control Plan (Section 24.11); Fish and Aquatics Effects Monitoring and Management Plan (Section 24.6); Fish Habitat Offsetting Plan (Appendix 14-E)	Not significant (moderate)	N/A	Fishing	Y
Fish	Trout, Rainbow Trout, and Coho Salmon] and Aquatic Resources VCs in Lower Harper Creek)	Mine Waste and ML/ ARD Management Plan (Section 24.9); Fish and Aquatic Effects Monitoring and Management Plan (Section 24.6); Selenium Management Plan (Section 24.12); Soil Salvage and Storage Plan (Section 24.14); Site Water Management Plan (Section 24.13); Sediment and Erosion Management Plan (Section 24.11)	Not significant (minor)	N/A	Fishing	N*
Fish Habitat	Potential for effects due to nutrient loading in Harper Creek watershed, Baker Creek, and Jones Creek (Aquatic Resources VC)	Explosives Handling Plan (Section 24.5); Site Water Management Plan (Section 24.13)	Not significant (moderate)	N/A	Fishing	N*
Moose	Habitat alteration, disturbance and displacement, mortality	Reclamation and Closure Plan (Chapter 7); Traffic and Traffic and Access Management Plan (Section 24.16)	Habitat alteration: Not significant (minor)	Habitat alteration: Not significant (minor)	Hunting	Y

(continued)

Table 23.5-2. Links between Aboriginal Rights, VCs, Effects, Mitigation, and Significance Conclusions in the Application/EIS (continued)

Valued Component	Potential Effect	Mitigation / Accommodation	Residual Effects		Rights Assessed	Scoped into Rights Assessment (Y/N)
			Project Only	Cumulative		
Ecological Communities at Risk (ECAR)	Habitat alteration and loss	Avoidance, flagged buffers; Closure and Reclamation Plan (Chapter 7); Fuel and Hazardous Material Management Plan (Section 24.7); Air Quality Management Plan (Section 24.2); Vegetation Management Plan (Section 24.17); Soil Salvage and Storage Plan (Section 24.14)	Habitat Loss: Significant (major)	Not significant (moderate)	Gathering	Y
Wetlands	Habitat alteration and loss	Closure and Reclamation (Chapter 7); Vegetation Management Plan (Section 24.17); Air Quality Management Plan (Section 24.2)	Habitat loss: Significant (major) Habitat alteration: Not significant (minor)	Not significant (minor)	Gathering	Y
Old growth Forest	Habitat alteration and loss	Air Quality Management Plan (Section 24.2); Vegetation Management Plan (Section 24.17); Soil Salvage and Storage Plan (Section 24.14); Closure and Reclamation Plan (Chapter 7)	Habitat loss: Not significant (moderate)	Not significant (moderate)	Gathering	Y
Human Health (Country Foods Quality)	Change in country foods quality	No hunting within the Project Site. Vegetation Management Plan (Section 24.17); Selenium Management Plan (Section 24.12); Fish and Aquatic Effects Management Plan (Section 24.6); Air Quality Management Plan (Section 24.2); Mine Waste and ML/ARD Management Plan (Section 24.9); Soil Salvage and Storage Management Plan (Section 24.14); Site Water Management Plan (Section 24.13); Sediment and Erosion Control Management Plan (Section 24.11); Fish Habitat Offsetting Plan (Appendix 14-E)	Not significant (minor)	Not significant (minor)	Fishing, Hunting, Gathering	Y

(continued)

Table 23.5-2. Links between Aboriginal Rights, VCs, Effects, Mitigation, and Significance Conclusions in the Application/EIS (completed)

Valued Component	Potential Effect	Mitigation / Accommodation	Residual Effects		Rights Assessed	Scoped into Rights Assessment (Y/N)
			Project Only	Cumulative		
Current Use of Lands and Resources for Traditional Purposes	Change in ability to access or use cultural sites – rock cairns	Mitigation measures will be developed in consultation with local First Nations, and the BC Archaeology Branch	Not Significant (moderate)	N/A	Cultural and spiritual use	Y
Current Use of Lands and Resources for Traditional Purposes	Change in quality and experience of the natural environment in the Harp Mountain area – Visual Quality	Noise Management Plan (Section 24.10); Visual design principles; Closure and Reclamation Plan (Chapter 7)	Not significant (moderate)	Not significant (moderate)	Fishing, Hunting/ Trapping, Gathering, Cultural and Spiritual Uses	Y
Current Use of Lands and Resources for Traditional Purposes	Change in abundance and distribution of fish resources (Bull Trout) in upper Harper Creek, lower P and lower T creeks	Mine Waste and ML/ ARD Management Plan (Section 24.9), Fish and Aquatic Effects Monitoring and Management Plan (Section 24.6); Soil Salvage and Storage Plan (Section 24.14), Site Water Management Plan (Section 24.13), Sediment and Erosion Control Plan (Section 24.11), Explosives Handling Plan (Section 24.5); Fish Habitat Offsetting Plan (Appendix 14-E)	Not significant (minor)	N/A	Fishing	Y
Current Use of Lands and Resources for Traditional Purposes	Change in abundance and distribution of wildlife resources (moose)	Wildlife Management Plan (Section 24.19), Noise Management Plan (Section 24.10); Spill Prevention and Response Plan (Section 24.15); Air Quality and Dust Management Plan (Section 24.2), Vegetation Management Plan (Section 24.17); Prohibition of hunting in Project Site	Not significant (minor)	Not significant (minor)	Hunting, Trapping	Y

**Project residual effects that are not expected to impact current Aboriginal use or Aboriginal rights have been scoped out of the rights assessment (see Section 23.5.22 and 22.4.2 in Chapter 22 Current Use of Lands and Resources for Traditional Purposes).*

The northwest corner of the reserve claim area overlaps with the downstream receiving environment of the Project Site (i.e., Harper Creek and North Barrière Lake watershed). Although the claim has not been accepted by the Indian Claims Commission, it is assumed that Aboriginal rights by the Lakes Division members may also be practiced in the Reserve Claim. Ethnohistorical evidence of use in the Project Site by the Lakes Division members was not available.

This chapter assesses the potential for residual effects of the Project to impact Aboriginal rights to fish, hunt, trap, and gather culturally important resources, and to access and use important cultural sites. Other Aboriginal interests, issues and concerns outlined in Table 22.3-1 that do not have a rights-based component are addressed in Section 23.6.

23.5.3 Assessment Boundaries

23.5.3.1 Spatial Boundaries

As discussed in Section 23.5.2.2, it is assumed that each Aboriginal group may practice their rights anywhere in their asserted territory. Impacts on rights will be assessed in the following:

- Simpcw First Nation Aboriginal Rights Study Area- which is the same as the SFN traditional territory (Figure 23.1-3);
- Shuswap Lakes Division Aboriginal Rights Study Area- which is the same as the traditional territory of the historical Shuswap Lakes Division (Figure 21.3-2), and
- the Neskonlith Douglas Reserve Claim Area (Figure 23.1-4) to determine the potential impact on rights that may be exercise in this area by the historical Lakes Division.

No study area could be delineated for an assessment of effects to Métis rights since MNBC does not assert a traditional territory (see Section 23.1.2).

23.5.3.2 Temporal Boundaries

The temporal boundaries of the Project are outlined in Table 23.5-3.

Table 23.5-3. Temporal Boundaries of Harper Creek Project

Phase	Project Year	Length of Phase	Description of Activities
Construction	-2 and -1	2 years	Pre-construction and construction activities
Operations 1	1 - 23	23 years	Active mining in the open pit from year 1 through to year 23.
Operations 2	24 - 28	5 years	Low-grade ore processing from the end of active mining through to the end of year 28.
Closure	29 - 35	7 years	Active closure and reclamation activities while the open pit and TMF are filling.
Post-Closure	36 onwards	50 years	Steady-state long-term closure condition following active reclamation, with ongoing discharge from the TMF and monitoring.

23.5.3.3 *Technical Boundaries*

Despite the requests for and efforts of YMI to obtain site-specific traditional knowledge and traditional land use information from Aboriginal groups, this information was provided only by SFN, and details regarding the locations, timing, use and quantity of harvested resources by SFN are limited. YMI relied on desk-based research of the Shuswap Lakes Division (ALIB, NIB, LSIB) to provide information on use of lands and resources. There is a lack of information related to First Nations' use of the LSA for fishing, hunting and trapping, gathering, or use of sacred or other sites. A conservative approach was taken to the assessment which assumes that rights could be exercised anywhere in the traditional territory regardless of whether site-specific information is available.

23.5.4 **Effects on Aboriginal Rights on the Simpcw First Nation**

The SFN assert rights to hunt, fish, trap, and harvest berries and other food and medicinal plants throughout their traditional territory. Although 100% of the Project is within SFN territory, the Project overlaps less than 0.1% in the southern part. Important SFN place names close to the Project Site are shown in Figure 23.5-1.

23.5.4.1 *Impact to the Exercise of Fishing Rights*

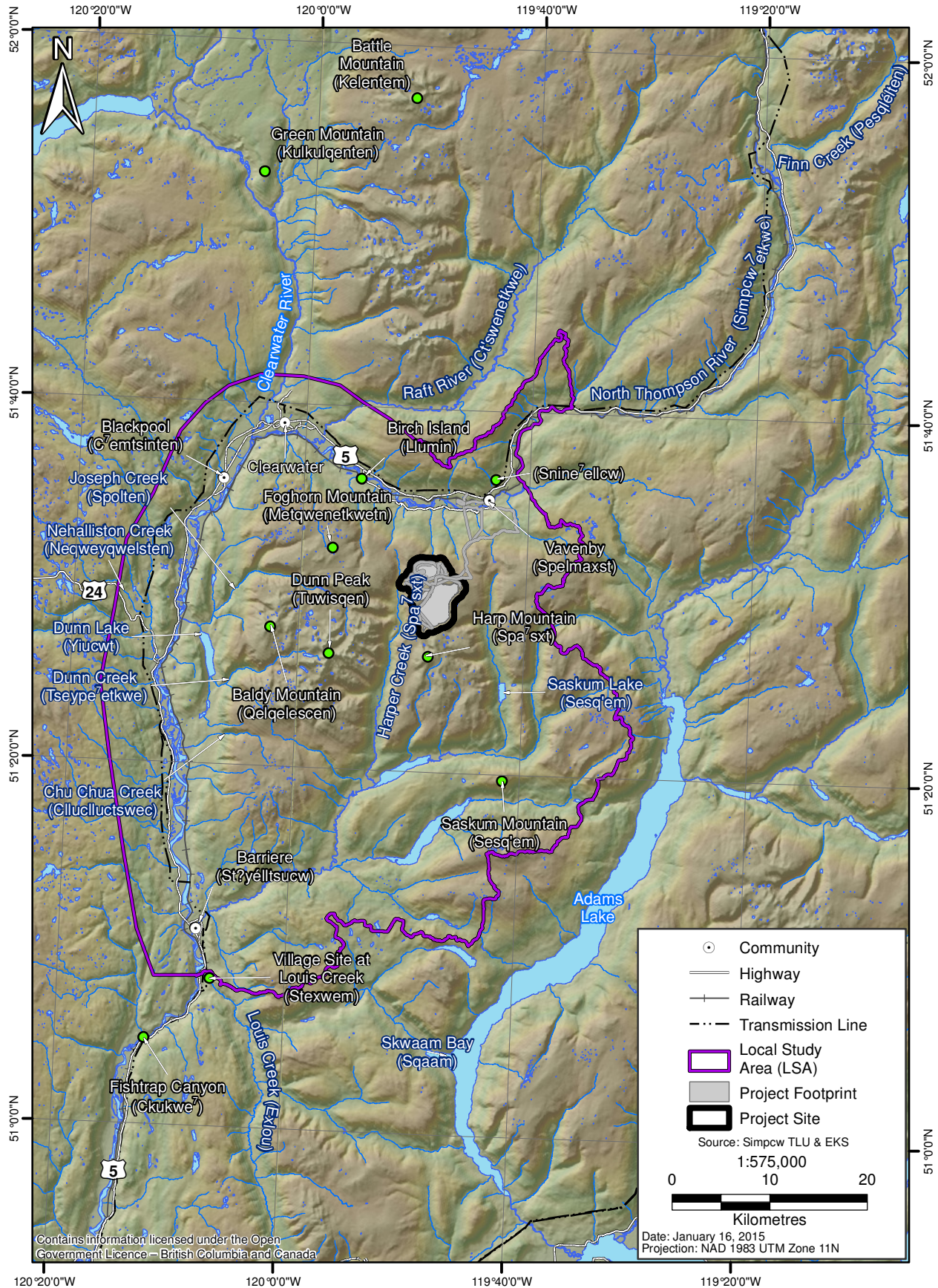
Fishing and the seasonal salmon harvest is traditionally an important activity for the Simpcw and wider Secwepemc culture to supplement subsistence hunting activities. SFN harvest Chinook, sockeye, and other salmon species, as well as Bull Trout and Rainbow Trout. Watersheds of particular importance for fish resources include Finn Creek, Raft River, and the North Thompson River ([Appendix 23-B](#)). No effects to any of these waterbodies are anticipated as a result of Project activities.

The Barrière River, Louis Creek, Dunn Lake and Harper Creek were also identified as places where SFN fish; a fishery for Sockeye salmon in the Barrière River is mentioned in the DFO Comprehensive Fisheries Agreement for food, social, and ceremonial purposes (DFO 2008). The Simpcw fish for Bull Trout and Rainbow Trout in lower Harper Creek. No information related to fishing was provided for creeks directly affected by the Project (i.e., P, T, Baker, or Jones creeks). The SFN also fish for Sockeye, Coho, Chinook, Bull Trout and Rainbow Trout in the North Thompson River and Sockeye, Coho and Chinook salmon in the Barrière River (Tables 4 and 5, Simpcw TLU & EKS). The Project Site is non-fish bearing. Fish species of interest to the SFN are provided in [Appendix 23-C](#).

As indicated in Chapter 22 (Current Use of Lands and Resources for Traditional Purposes), the Project is anticipated to have a minor indirect residual effect on SFN fishing activities in the LSA, particularly along lower Harper Creek, due to a change in surface water quantity. Activities during the Construction, Operation, Closure, and Post-Closure phases of the Project may affect fish resources because of Project-related changes to surface water quantity (e.g., flow reductions) from the establishment and operation of mine components (e.g., the non-PAG waste rock stockpile, open pit, and TMF). Hydrological modelling (Chapter 12) predicts mine components will reduce monthly stream flows in upper Harper Creek (between P and T Creeks), lower P Creek and lower T Creek below Bull Trout habitat thresholds for life stages specific to each stream. In the lower reaches of Harper Creek, predicted flows are sufficient to sustain Bull Trout, Rainbow Trout, and Coho Salmon life history and productivity similar to pre-mine conditions, especially during sensitive low flow summer (October) and winter months (December to March).

Figure 23.5-1

Important Simpcw First Nation Place Names in the Local Study Areas



A Fish Habitat Offsetting Plan ([Appendix 14-E](#)) has been developed to balance the loss of the fish habitat in upper Harper Creek, lower P Creek, and lower T Creek. While a follow-up program to ensure the offset projects are effective will be implemented, a moderate direct residual effect on the Bull trout recreational fishery in upper Harper Creek, lower P Creek, and lower T Creek due to changes in water quantity is predicted because of uncertainty of the effectiveness of the offset measures.

Although there are predicted direct residual effects on fish, this minor effect was not predicted to affect access or use of fishing activities by the SFN. Characterization of the residual effects on fish due to changes in water quality found that the predicted concentration of contaminants of potential concern (COPCs; e.g., dissolved cadmium, total copper, and total selenium) in water were below toxicity thresholds (i.e., the concentration of a parameter in water that causes adverse effects in fish; Sections 14.5.3.2 and 14.5.3.3). Since the predicted concentrations for the COPCs in water are below toxicity thresholds for fish, it is unlikely that the residual effects on fish may alter the abundance of the fish populations.

However, changes in water quality also have the potential to change the quality of aquatic country foods such as fish. Based on the surface water quality model results ([Appendix 13-C](#)), residual effects are predicted at the edge of the LSA (i.e., at the HB modelling node in lower Harper Creek) due to changes in water quality (Section 13.5.3), which could also affect fish (Section 14.5.3.2). Based on further qualitative assessment, it is possible that water quality may change within the RSA at the outlet of North Barrière Lake and in the Barrière River, until dilution is sufficient to reduce concentrations of cadmium, copper, and selenium to below BC WQG or background conditions. Changes in water quality could affect the quality of aquatic country foods (fish) within a small portion of the human health RSA, within SFN territory.

Given the above discussion, the characterization of the impact of the Project on fishing rights is based on changes to fish and fish habitat arising from surface water quantity and changes in water quality that have the potential to affect country foods quality of aquatic resources (fish).

Impacts on fishing rights as a result of the Project will be accommodated through the implementation of mitigation measures described elsewhere in the Application/EIS. These measures include the implementation of Environmental Management Plans including a Site Water Management Plan outlining plans to manage surface water (Section 24.13), a Selenium Management Plan, a Fish and Aquatic Effects Management and Monitoring Plan (Section 24.6), a Fish Habitat Offsetting Plan ([Appendix 14-E](#)), a Mine Waste and ML/ARD Management Plan (Section 24.9) and a Sediment and Erosion Control Plan (Section 24.11). HCMC has committed to consider additional water management options to reduce concentrations of water quality parameters and mitigate water quality effects in T Creek through iterative technical and predictive studies (Section 3.5.5). Additionally, YMI will continue to consult the SFN, and involve the SFN (along with the Lakes Division members) in an environmental monitoring program that will be established for the life of mine. Follow-up programs for selenium and to monitor the success of the fish habitat offsetting plan will also be implemented.

The characterization of the residual impact to SFN fishing rights is as follows:

- **geographic extent** of the residual impact to SFN fishing rights is *regional* due to a change in water quality, but avoids effects in areas of higher use in the SFN traditional territory;
- **magnitude** is *low* since the effects are restricted to Bull Trout (rather than other culturally important species such as salmon) and the change in quality of country foods is minor;
- **frequency** of the impact on fishing rights is predicted to be *continuous* during the Project Construction, Operations, and Closure phase;
- **duration** of the impact on fishing rights due to the loss of Bull Trout and changes in country foods quality will continue into Post-Closure; therefore, the effect is considered to last into the *future*;
- **reversibility** – the impact is expected to be *partially reversible* due to the implementation of the Fish Habitat Offsetting Plan and the Selenium Management Plan, which are both supported by Follow-up Programs for the purposes of adaptive management;
- **resiliency** – social context is considered *low* because specific fishing sites on Harper Creek have not been identified by the SFN and Harper Creek is therefore understood not to be a preferred Aboriginal fish harvesting area. Numerous alternate, more abundant fish harvesting sites are available closer to home along the North Thompson River and Barrière River.

Based on the characterization of the residual impact on Aboriginal fishing rights above, the Project is predicted to have a **minor** impact on the exercise of Simpcw fishing rights. Although the SFNs ability to exercise fishing rights will be somewhat modified over a local to regional scale downstream of the project, since the Project Site occupies less than 0.1% of SFN traditional territory (Section 23.1.3), the construction of Project infrastructure will not displace SFN's ability now, or in the future, to access fishery resources in other parts of their territory.

23.5.4.2 *Impact to the Exercise of Hunting and Trapping Rights*

Simpcw historically hunted caribou, grouse, waterfowl and turtle, as well as moose, elk, Big Horn sheep, deer, porcupine, marmot, grizzly bear, black bear and mountain goat. Animals trapped included beaver, marten, fisher, fox, black bear, lynx, and bobcat (for trade) and rabbit, muskrat, marmot, badger and wolverine ([Appendix 22-A](#)). The SFN TLU & EKS ([Appendix 22-A](#)) notes hunting territories from north of Adams Lake, throughout the TumTum, Oliver, Finn, and Avola Creek areas. These locations are outside of the Wildlife RSA. Caribou hunting also occurred on Baldy Mountain and Harp Mountain in the LSA (Figure 23.5-2). SFN has two registered traplines which overlap the RSA. No specific hunting or trapping areas were indicated in the immediate vicinity of the Project by the SFN. Habitat fragmentation due to road construction and logging activities in the area of the Project is a pre-existing impact that has affected migratory patterns and distribution of wildlife in the regional area.

Moose and mule deer occur in the wildlife RSA (Chapter 16), although the area occurs at sufficiently high elevation that snowfall likely limits their use of the wildlife RSA in winter. Neither grizzly bears nor caribou are common in the RSA, partially due to the levels of existing disturbance, and high road density but a few observations of grizzly bears were made during baseline studies. Fisher

and wolverine occur in the RSA, though they are not abundant. A variety of migratory birds occur in the RSA, including raptors (bald eagle, northern goshawk) and a variety of upland birds, including listed species such as barn swallow, common nighthawk, and olive-sided flycatcher. Western toad also occurs in ponds in the LSA. Bats were also recorded in the LSA, although the area is likely too high elevation, and therefore too cold, to support bat hibernacula.

As indicated in Chapter 22 (Current Use of Lands and Resources for Traditional Purposes), the Project is anticipated to have a minor residual effect on SFN hunting activities in the LSA, particularly in the upper Harper Creek and Harp Mountain area, due to a change in distribution and abundance of resources such as moose. The history of disturbance and the high road density (greater than 2.4 km/km²) already existing in the wildlife LSA has likely reduced habitat suitability and use of the area. This is an existing impact from past activities. More than 77.4% and 22.9% of the moose habitat (growing season and security/thermal habitat, respectively) within the LSA will be affected by the Project. Although mitigation may recover some of this lost habitat, the effectiveness of mitigation is unknown. Therefore, a residual effect to moose due to habitat alteration is anticipated (Section 16.5.3.6) and a minor change in abundance and distribution in wildlife (moose) resources may occur.

Impacts on hunting rights as a result of residual effects will be accommodated through the implementation of mitigation measures described elsewhere in the Application/EIS. A number of Environmental Management Plans will be undertaken to accommodate impacts on rights, including a Wildlife Management Plan (Section 24.19), a Traffic and Access Management Plan (Section 24.16), and a Noise Management Plan (Section 24.10).

Given the above, the characterization of impact to SFN hunting and trapping rights is as follows:

- **geographic extent** of the residual impact to SFN hunting and trapping rights is *local*; due to challenging topography and seasonal access this area is not likely accessed very frequently;
- **magnitude** is *low* since the impact is restricted to moose
- **frequency** of the impact on hunting rights is predicted to be *continuous* during the Project Construction, Operations, and Closure phase;
- **duration** of the impact on hunting rights due to reductions in abundance and distribution of wildlife resources (moose) as a result of habitat alteration will end once Closure and Reclamation activities commence; therefore, the effect is considered to be *long-term*;
- **reversibility** of the impact is expected to be *reversible* once Closure and Reclamation activities commence;
- **context** of the impact is *low* because specific hunting areas near the Project Site or in the Harper Creek area have not been identified by the SFN. Based on the characterization of the residual impact on Aboriginal hunting rights above, the Project is predicted to have a **negligible** impact on the exercise of Simpcw hunting rights. Although the SFNs ability to hunt may be somewhat modified, since the Project Site occupies less than 0.1% of SFN traditional territory (Section 23.1.3), the construction, operation, and closure of the Project will not displace SFN's ability now, or in the future, to access hunting resources in their territory.

23.5.4.3 *Impact to the Exercise of Gathering Rights*

The SFN collect berries such as Saskatoons and soapberry, tubers such as Indian potato and balsamroot, as well as various mosses, grasses and trees for a combination of subsistence, utilitarian and medicinal purposes throughout their territory. The Simpcw are concerned about impacts on food procurement areas, including plant harvesting sites and their ability to access traditional use sites ([Appendix 3-F](#)). The SFN have identified impacts on culturally important plant species (Table 22.4-3) as issues of concern. It is known that the Simpcw gather a variety of different plant species including fir, horsetail, mosses and grasses (Table 22.3-4, Chapter 22) in the LSA and that food is harvested near Vavenby, Harp and Vavenby Mountains, Harper Creek, along the North Thompson River between Vavenby and Clearwater, and the south side of the North Thompson River, and on both sides of Chuck Creek.

Traditional plants listed in the SFN TLU & EKS (Table 22.3-4) were reviewed by a botanist; species included in this list were either not expected to be impacted by the Project, were common throughout the LSA, were classified as introduced species, or do not occur in the area. Given this, culturally important plant resources were predicted to be negligibly affected by the Project and were excluded from further assessment (Chapter 15; [Appendix 15-C](#)).

Potential effects of the Project on vegetation as a result of habitat alteration or loss (Chapter 15) were assessed for wetlands, ecological communities at risk, and old-growth forest. A significant loss of wetlands was identified to occur in the TMF area which will be reclaimed as described in the Closure and Reclamation Plan (Chapter 7). Avoidance, flagged buffers, clear spanning powerline, appropriate culverts, management of edge effects, dust management, contaminants control measures, invasive plant species control, and progressive reclamation will mitigate additional alteration of edge habitat. A moderate (not significant effect) on old growth forest was found due to habitat loss and alteration in the vegetation LSA. Measures described above will be used to mitigate this effect also.

Impacts on gathering rights as a result of Project residual effects will be accommodated through the implementation of mitigation measures and Environmental Management Plans contained in Chapter 24 of the Application/EIS. In particular, a Vegetation Management Plan (Section 24.17), Closure and Reclamation Plan (Chapter 7), Air Quality Management Plan (Section 24.2), and Spill Prevention and Response Plan (Section 24.15).

While there are sites within the LSA identified by SFN as food gathering sites ([Appendix 23-B](#)), no specific information was provided on whether these were for gathering plants, or the types of plants gathered at these sites. As the Project Site is in SFN territory and because rights can be exercised anywhere within a territory, it is assumed that gathering activity could occur within other areas in the regional area.

Given the above, the characterization of impact to SFN gathering rights is as follows:

- **geographic extent** of the residual impact to SFN gathering rights is *local*; due to challenging topography and seasonal access, and an active grazing tenure in this area it is not likely accessed very frequently;

- **magnitude** is *low* since culturally important plants were scoped out of the vegetation assessment due to negligible impact but there are two significant impacts to wetlands and rare plants which are resources the SFN could have used for gathering purposes;
- **frequency** of the impact on gathering rights is predicted to be *continuous* due to the construction and operation of Project components;
- **duration** of the impact on gathering rights is expected to last into the *future* due to the loss of the wetlands; however, this loss will be partially offset by reclamation of wetlands that will be initiated progressively;
- **reversibility** – the impact is expected to be permanent;
- **resiliency** or context of the impact is *low* because specific gathering areas near the Project Site or in the Harper Creek area have not been identified by the SFN.

Based on the characterization of the residual impact on Aboriginal gathering rights above, the Project is predicted to have a **minor** impact on the exercise of Simpcw gathering rights. Although the SFNs ability to gather may be somewhat modified, since the Project Site occupies less than 0.1% of SFN traditional territory (Section 23.1.3), the construction, operation, and closure of the Project will not displace SFN's ability now, or in the future, to access culturally important plant resources in their territory.

23.5.4.4 *Impact on Cultural Use Rights*

The Construction, Operation, and Closure phases of the Project have the potential to affect the use of Aboriginal habitations, trails, cultural and spiritual sites. The Simpcw are concerned about impacts on their social and cultural practices, and transportation corridors including trails, creeks and rivers. Concerns related to impacts on archaeological sites, mitigation measures for two rock cairns in the TMF area, and effects on access to traditional sites and their ability to practice their traditional livelihood and cultural practises have been raised by the SFN. The SFN have identified habitations, trails, cultural and spiritual sites in the vicinity of the Project (Section 22.4.3.2; [Appendix 22-A](#)). The SFN TLU & EKS ([Appendix 22-A](#)) identifies 20 traditional use sites in the LSA. Of these, six are used for transportation, 10 are used for habitation, one is associated with traditional history, nine have specific place names, and two are sacred sites. The Vavenby–Birch Island–Raft Mouth, and Vavenby–Harper Creek–North Lake–Barriere routes and places of habitation and resource harvest in particular were well established and remain well used.

The potential impact on access to two potential cultural features (rock cairns) was assessed and found to be not significant (moderate) in Chapter 22. The function of the rock cairns is currently unknown. HCMC will consult with the BC Archaeology Branch and potentially affected First Nations on mitigation measures. The assessment on current use of lands and resources (Chapter 22) also found a minor residual socio-economic indirect effect on SFN gathering activities in the LSA, in the upper Harper Creek and Harp Mountain area. A change in visual quality and experience of the natural environment while engaged in harvesting activities is expected in these locations. The Project is anticipated to moderately affect the visual landscape at Viewpoint 9 (Harp Mountain) and Viewpoint 10 (Harp Mountain Trail #1). Harp Mountain is culturally important to SFN. Mitigation of visual quality effects includes ensuring Visual Quality Objectives (VQOs)

established for the North Thompson River valley are met, and that the Closure and Reclamation Plan is implemented to revegetate disturbed areas as quickly as possible (Chapter 7).

Impacts on rights to cultural uses as a result of residual effects will be accommodated through the implementation of mitigation measures described elsewhere in the Application/EIS. A number of Environmental Management Plans will also be undertaken to accommodate impacts on rights, including a Noise Management Plan (Section 24.10), a Closure and Reclamation Plan (Chapter 7), and a Traffic Access Management Plan.

Given the above, the characterization of impact to SFN cultural use rights is as follows:

- **geographic extent** of the residual impact to SFN cultural use rights is *local*;
- **magnitude** is high since impacts on the two rock cairns cannot be avoided;
- **frequency** of the impact on cultural use rights is predicted to be *continuous* during all phases of the Project;
- **duration** of the impact on cultural use rights will extend into the *future*;
- **reversibility** of the impact is expected to be *permanent* due to the loss of the rock cairns;
- **resiliency** or context of the impact is *low* because the function of the rock cairns is unknown and may not be of cultural value.

Based on the characterization of the residual impact on Aboriginal cultural use rights above, the Project is predicted to have a **minor to moderate** impact on the exercise of Simpcw cultural use rights, depending on the function of the rock cairns. Due to numerous alternate roads, including SFN trails, available in the LSA to access important traditional sites, the Project is not expected to affect access to other traditional sites. However due to challenging topography and seasonal access, and the active grazing tenure, if any traditional sites are located in this area, they are likely not accessed very frequently.

23.5.4.5 Assessment of Overall Impact on the Exercise of Simpcw First Nation Aboriginal Rights

Given the above analysis and that HCMC has committed to implementing a range of mitigation measures, residual adverse effects of the Project are predicted to have an overall **minor** level of impact to SFN's Aboriginal rights. The Project is not expected to affect the ability of present and future generations to exercise their rights, or modify their customs and practices related to fishing, hunting, gathering, or cultural and spiritual uses. There is a low likelihood of the impact occurring, with a medium confidence in its characterization.

23.5.5 Effects on Aboriginal Rights of the Historical Shuswap Lakes Division (Adams Lake Indian Band, Neskonlith Indian Band, Little Shuswap Indian Band)

The historical Shuswap Lakes Division assert rights to hunt, fish, trap, and harvest berries and other food and medicinal plants throughout their traditional territory (Figure 23.1-2). The available ethno-historical information does not note any site-specific use within the Project Site by the Shuswap Lakes Division. For the purposes of this assessment, it is assumed that the historical Lakes Division has interests in the area of the Neskonlith Douglas Reserve Claim that should be considered.

The Project Site is outside of the boundary attributed to the historical Shuswap Lakes Division as well as the Douglas Reserve claim area. The north-west corner of the Neskonlith Douglas Reserve claim area is located several kilometres south of the Project Site and overlaps lower Harper Creek and the North Barrière Lake watershed, downstream of the Project.

23.5.5.1 *Impact to Fishing Rights*

The primary fish species harvested by Secwepemc peoples included Pacific salmon (all species), sturgeon, trout, and whitefish (Section 22.4.3.2). A list of fish species important to ALIB is found in Table 22.4-1 of Chapter 22. The Adams River, South Thompson River, Shuswap and Little Shuswap lakes are utilized for fishing. Under the 2008 Comprehensive Fisheries Agreement with the Minister of Fisheries and Oceans Canada (DFO) SNTC member communities may fish for food, social and ceremonial purposes for the species and quantity established in accordance with the Agreement, and DFO agrees to manage the various fisheries based on the principle of the Aboriginal fisheries having highest order of priority after conservation. The Agreement provides for the parties to jointly develop annual fishing plans, and for communal fishing licences to be issued to SNTC members, including the ALIB, NIB and LSIB. The licences include harvesting for Coho, Sockeye, Chinook and Pink salmon. The fisheries in the Agreement are as follows:

- ALIB:
 - Little Shuswap Lake using a gill net set from communal fishing boat for sockeye and chinook,
 - Scotch Creek using the stock enumeration weir for sockeye,
 - Lower Adams River using dip nets, gaffs, and spears for sockeye and chinook,
 - South Thompson River, Little River and Shuswap Lake near the mouth of Adams River using beach seine for sockeye and chinook;
- NIB:
 - South Thompson River using gill net for sockeye and chinook,
 - Little Shuswap Lake using gill net for sockeye and chinook;
- LSIB:
 - Little Shuswap Lake and Little River using a gill net for sockeye and chinook,
 - Scotch Creek with the aid of a sockeye counting fence.

The Project will not affect the fishing areas identified for the Lakes Division in the 2008 Comprehensive Fisheries Agreement with the Minister of Fisheries and Oceans Canada (DFO).

During consultation in the EA process, the ALIB asked questions regarding fish distribution, effects of the powerline and access road upgrades on fish and aquatic habitat, and asked for more information on fish habitat offsetting options. ALIB also raised concerns around potential environmental effects on the Neskonlith Douglas Reserve Claim (Figure 23.1-4). The north-west corner of the Neskonlith Douglas Reserve claim area is part of the Harper Creek and North Barrière Lake watershed which could potentially be affected by downstream effects of the Project. The ALIB have identified

concerns regarding tailings management facility (TMF) seepage into streams, spillway design and water treatment of TMF supernatant, and concern with downstream effects of the Project as it drains south into Harper Creek and beyond.

The NIB have raised issues with respect to fish and fish habitat being impacted in the Harper Creek watershed and Barrière River system and have expressed an interest in being involved in fish habitat offsetting plan. The NIB have also expressed concerns related to metal leaching/acid rock drainage (ML/ARD) effects on water quality, and the release of contaminants into the North Thompson River or Harper Creek as a result of an accident or failure.

As discussed above in Section 23.5.4.1 and in Chapter 22, the Project has the potential to impact fish (Bull Trout) and Bull Trout habitat and consequently fishing activities as a result of changes in surface water quantity and quality in upper Harper Creek, P and T creeks. Changes in water quality also have the potential to change the quality of aquatic country foods such as fish. Based on the surface water quality model results ([Appendix 13-C](#)), residual effects are predicted at the edge of the LSA (i.e., at the HB modelling node in lower Harper Creek) due to changes in water quality (Section 13.5.3), which could also affect fish (Section 14.5.3.2). Based on further qualitative assessment, it is possible that water quality may change within the RSA at the outlet of North Barrière Lake and in the Barrière River, until dilution is sufficient to reduce concentrations of cadmium, copper, and selenium to below BC WQG or background conditions. Changes in water quality could affect the quality of aquatic country foods (fish) within a small portion of the human health RSA.

Any potential impacts on fishing rights as a result of the Project will be accommodated through the implementation of mitigation measures described elsewhere in the Application. A number of Environmental Management Plans will also be undertaken including a Site Water Management Plan (Section 24.13), a Fish and Aquatic Effects Management Plan (Section 24.6), and a Fish Habitat Offsetting Plan ([Appendix 14-E](#)).

The characterization of impact to Shuswap Lakes Division fishing rights is as follows:

- **geographic extent** of the residual impact to the Lakes Division fishing rights is *regional* due to a change in water quality which in turn could affect country food quality of aquatic species such as fish;
- **magnitude** is minor since the impact is restricted to Bull Trout (rather than other culturally important species such as salmon and the Fish Habitat Offsetting Plan will mitigate productivity losses and a Selenium Management Plan will adaptively manage water quality issues);
- **frequency** of the impact on fishing rights is predicted to be *continuous* during all phases of the Project
- **duration** of the impact on fishing rights due to changes in fish and fish habitat and quality of country foods will be *future*;
- **reversibility** of the impact is expected to be *partially reversible* once Closure and Reclamation activities commence;

- **resiliency** or context of the impact is *low* because specific fishing areas near the Project Site or in the Harper Creek area have not been identified by the Shuswap Lakes Division. Therefore, Harper Creek is understood not to be a preferred Aboriginal wildlife hunting area. Numerous alternate fishing sites are available in the historical Lakes Division territory.

Although the Shuswap Lakes Division territory does not overlap with the Project, their ability to exercise fishing rights may be somewhat modified over a local to regional scale downstream of the project in Harper Creek, North Barrière Lake and Barrière River. The construction of Project infrastructure will not displace Shuswap Lake Divisions ability now, or in the future, to access fishery resources in other parts of their territory or claim area. Based on the characterization of the residual impact on Aboriginal fishing rights above, the Project is predicted to have a **minor** impact on the exercise of Shuswap Lakes Division fishing rights.

23.5.5.2 *Impact to the Exercise of Hunting and Trapping Rights*

Animals traditionally hunted and snared by the Secwepemc included deer, elk, caribou, marmot, sheep, hare, beaver, grouse, bear, moose, duck, goose, crane, squirrel, porcupine, and turtles. The main animals trapped were marten, mink, fisher, beaver, fox and lynx (Section 22.4.3.2). A list of wildlife species important to ALIB is found in [Appendix 23-C](#), Table 23-C2. Hunting territories used by Shuswap Lakes Division include north of Adams Lake, throughout the TumTum, Oliver, Finn, and Avola Creek areas. Caribou hunting also occurred on Tod Mountain (Sun Peaks). The area between Neskonlith Lake and McGillvray Lake was also used for hunting (Section 22.4.3.2). All of these areas are not affected by the Project as they are located some distance away from the Project.

No specific hunting or trapping areas currently used and affected by the Project footprint have been identified by the NIB. The NIB have identified impacts on noise from operations disturbing wildlife adjacent to the mine site and impacts on access to culturally important areas as issues of concern ([Appendix 3-F](#)). The NIB also raised a concern regarding the mine operation impacting NIB culture, health and social well-being as a result of degraded water quality in the Barrière River and North Thompson River watersheds and related impacts to important wildlife species.

No specific current hunting or trapping areas affected by the Project footprint have been identified by the LSIB. The LSIB raised the following issues related to wildlife:

- impacts on access to hunting and gathering sites;
- excess noise disturbing wildlife, especially during mating and birthing and the need for mitigation;
- unauthorized hunting and the use of firearms by Project personnel; and
- increase in mine traffic impeding/ disrupting wildlife movement.

As already described in Section 23.5.4.2, the Project is predicted to have a minor residual effect on potential hunting resources, particularly in the upper Harper Creek and Harp Mountain area, due to a change in distribution and abundance of moose resulting from habitat alteration. After a review of publically available secondary source materials, and consultation with ALIB, NIB and LSIB, specific Shuswap Lakes Division hunting or trapping sites or areas within the LSA were not identified.

Any potential impacts on hunting rights as a result of Project residual effects will be accommodated for through the implementation of mitigation measures described elsewhere in the Application/EIS. A number of Environmental Management Plans will be undertaken to accommodate impacts on rights, including a Wildlife Management Plan (Section 24.19), a Traffic and Access Management Plan (Section 24.16) and a Noise Management Plan (Section 24.10).

The characterization of impact to Shuswap Lakes Division hunting and trapping rights is as follows:

- **geographic extent** of the residual impact to historical Lakes Division hunting and trapping rights is *local*; due to challenging topography and seasonal access, and active grazing tenure, this area is not likely accessed very frequently;
- **magnitude** is *low to moderate* since the impact is restricted to moose which has a stable population in the regional area and migration patterns in important hunting places (e.g., North Barrière Lake and Adams Lake drainage – ALIB) are not expected to be affected;
- **frequency** of the impact on hunting rights is predicted to be *continuous* during the Project Construction, Operations, and Closure phase;
- **duration** of the impact on hunting rights due to reductions in abundance and distribution of wildlife resources (moose) as a result of habitat alteration will end once Closure and Reclamation activities commence; therefore, the effect is considered to be *long-term*;
- **reversibility** of the impact is expected to be *reversible* once Closure and Reclamation activities commence;
- **context** of the impact is *low* because specific hunting areas near the Project Site or in the Harper Creek area have not been identified by the Shuswap Lakes Division, and the Project Site does not overlap with the asserted historical Lakes Division boundary or the Neskonlith Douglas Reserve Claim area.

Based on the characterization of the residual impact on Aboriginal hunting rights above, a **negligible** impact on the exercise of Shuswap Lakes Division hunting rights in the Project Site area is predicted. The ability to exercise hunting rights is unlikely to be modified anywhere near the Project Site, including in the Neskonlith Douglas reserve claim area. The construction of Project infrastructure will not displace Shuswap Lakes Divisions ability now, or in the future, to access hunting resources in other parts of their territory or claim area. Based on the characterization of the residual impact on Aboriginal fishing rights above, the Project is predicted to have a **negligible** impact on the exercise of Shuswap Lakes Division hunting and trapping rights.

23.5.5.3 Impact to the Exercise of Gathering Rights

Palmer (1975) interviewed Secwepemc elders and recorded 135 different plant species within the Shuswap Lakes Division that were suitable for food, medicine, ceremonial, habitation and technological use. Skwelkwewkwt (formerly Tod Mountain, now Sun Peaks) was especially important for harvesting roots (spring beauties & avalanche lilies), berries and medicinal plants. Scotch Creek (*Cemetekwe*) was an important berry picking area. People gathered cedar roots and birch bark here for making baskets. [Appendix 23-C](#) identifies plant species of importance to ALIB.

Based on available ethno-historical information, there is no site-specific use related to plant gathering within the mine footprint area by the Shuswap Lakes Division. No specific gathering sites currently used and affected by the Project footprint have been identified by the ALIB, NIB, or LSIB.

Issues raised by the ALIB relate to the protection and management of culturally important plants, effects on forestry, and a request to consider the plant species contained in a list provided by the ALIB to the EAO during the review of the draft AIR ([Appendix 15-C](#)). A general concern was identified by the NIB regarding impacts on access to culturally important areas that may be impacted by the Project. An issue with respect to important vegetation resources being affected by decreased water quality in the Barrière River and North Thompson River watersheds was also raised ([Appendix 3-F](#)). Impacts from mining operations on vegetation and plant communities, including but not limited to traditional use items providing medicinal, food, or ceremonial value that are on or adjacent to the Project Site was raised as a concern. Curtailed access to sites to gather resources during Operations and the condition of the sites in Post-Closure were raised as concerns by the LSIB ([Appendix 3-F](#)). Restoration of non-timber resources in closure was identified as a concern.

Traditional plants listed in the ALIB plant list were reviewed by a botanist; species included in this list were either not expected to be impacted by the Project, were common throughout the LSA, were classified as introduced species, or do not occur in the area. Given this, culturally important plant resources were predicted to be negligibly affected by the Project and were excluded from further assessment (Chapter 15; [Appendix 15-C](#)). Potential effects of the Project on vegetation as a result of habitat alteration or loss (Chapter 15) were assessed for wetlands, ecological communities at risk, and old-growth forest. As previously discussed, a significant loss of wetlands and rare plants was predicted in the vegetation LSA (Chapter 15) was identified. A moderate (not significant) effect on old growth forest was found due to habitat loss and alteration in the vegetation LSA.

Impacts on gathering rights as a result of residual effects will be accommodated for through the implementation of mitigation measures described elsewhere in the Application/EIS. A regional rare plant survey will be conducted, and windthrow management, buffers, avoidance, and invasive plant species control measures will be implemented. A number of Environmental Management and Monitoring Plans will be undertaken to accommodate impacts on rights, including a Vegetation Management Plan (Section 24.17) and Air Quality Management Plan (Section 24.2).

The characterization of impact to Shuswap Lakes Division gathering rights is as follows:

- **geographic extent** of the residual impact to Lakes Division gathering rights is *local*; due to challenging topography and seasonal access, and active grazing, this area is not likely accessed very frequently if at all;
- **magnitude** is negligible since culturally important plants were scoped out of the vegetation assessment and the Project Site does not overlap with either the historical Lakes Division boundary or the Neskonlith Douglas reserve claim area;
- **frequency** of the impact on gathering rights is predicted to be *continuous* due to the construction and operation of Project components;
- **duration** of the impact on gathering rights is expected to last into the *future* due to the loss of

the wetlands; however, this loss will be partially offset by a wetland reclamation that will be initiated progressively;

- **reversibility** - the impact is expected to be permanent;
- **resiliency** or context of the impact is *low* because specific gathering areas near the Project Site or in the Harper Creek area have not been identified by the Shuswap Lakes Division. Therefore, Harper Creek is understood not to be a preferred Aboriginal gathering area. Numerous alternate, gathering sites are available in Shuswap Lakes Division territory or in the Neskonlith Douglas Reserve Claim area.

Based on the characterization of the residual impact on Aboriginal gathering rights above, the Project is predicted to have a **negligible** impact on the exercise of historical Lakes Division gathering rights. The ability of the Shuswap Lakes Division to gather plant resources now, or in the future should not be affected by the Project since gathering sites affected by the Project are not within Shuswap Lakes Division territory or in the Neskonlith Douglas Reserve Claim area.

Impact to the Cultural Use Rights

The Construction, Operation, and Closure phases of the Project have the potential to affect the use of Aboriginal habitations, trails, cultural and spiritual sites. As indicated in Chapter 22, a review of publically available secondary source materials (including ethnohistorical information), and consultation efforts with ALIB, NIB and LSIB did not identify Shuswap Lakes Division cultural or spiritual uses within the Project Site area. Concerns regarding impacts of the Project on cultural and archaeological sites or landforms and impacts on access to culturally important areas were raised. It was noted that the ALIB would like archaeology and cultural heritage work undertaken prior to drilling. LSIB raised a concern regarding the unknown function of the rock cairns identified in the Archaeological Impact Assessment ([Appendix 20-A](#)). The impact on two cultural sites (rock cairns) was assessed and found to be not significant (moderate) in Chapter 22. The function of the rock cairns is currently unknown. HCMC will consult with BC Archaeology Branch and potentially affected First Nations regarding mitigation measures for the rock cairns.

The assessment on current use of lands and resources (Chapter 22) also found a minor residual socio-economic indirect effect on gathering activities in the LSA, in the upper Harper Creek and Harp Mountain area. A change in visual quality and experience of the natural environment while engaged in harvesting activities is expected in these locations. The Project is anticipated to moderately affect the visual landscape at Viewpoint 9 (Harp Mountain) and Viewpoint 10 (Harp Mountain Trail #1). Harp Mountain is considered sacred to SFN. Mitigation of visual quality effects includes ensuring Visual Quality Objectives (VQOs) established for the North Thompson River valley are met, and that the Closure and Reclamation Plan is implemented to revegetate disturbed areas as quickly as possible (Chapter 7).

Impacts on rights to cultural uses as a result of residual effects will be accommodated through the implementation of mitigation measures described elsewhere in the Application. A number of Environmental Management Plans will also be undertaken to accommodate impacts on rights, including a Noise Management Plan (Section 24.10), a Traffic Access Management Plan (Section 24.16), and a Heritage and Archaeology Management Plan (Section 24.3).

Given the above, the characterization of impact to historical Lakes Division cultural use rights is as follows:

- **geographic extent** of the residual impact to historical Lakes Division cultural use rights is *local*;
- **magnitude** is high since impacts to the rock cairns can't be avoided;
- **frequency** of the impact on cultural use rights is predicted to be *continuous* during all phases of the Project;
- **duration** of the impact on cultural use rights will extend into the *future*;
- **reversibility** of the impact is expected to be *permanent* due to the impacts on the rock cairns;
- **resiliency** or context of the impact is *low* because the function of the rock cairns is unknown and may not be of cultural importance.

Based on the characterization of the residual impact on Aboriginal cultural use rights above, the Project is predicted to have a **negligible** impact on the exercise of historical Lakes Division cultural use rights. Due to numerous alternate roads, including trails available in the LSA to access important traditional sites, the Project is not expected to affect access to other traditional sites. However due to challenging topography and seasonal access, and active grazing if any traditional sites are located in this area, they are likely not accessed very frequently. The ability to access cultural use sites now, or in the future by the historical Lakes Division should not be affected by the Project since traditional sites affected by the Project are not within Shuswap Lakes Division territory or in the Neskonlith Douglas reserve claim area.

23.5.5.4 *Assessment of Overall Impact on the Exercise of Shuswap Lakes Division Aboriginal Rights*

Given the above analysis and that HCMC has committed to implementing a range of mitigation measures, residual effects of the Project are predicted to have an overall **negligible** level of impact to Shuswap Lakes Division Aboriginal rights. The Project is not expected to affect the ability of present and future generations to exercise their rights, or modify their customs and practices related to fishing, hunting, gathering, or cultural uses. There is a medium likelihood of the impact occurring, with a medium confidence in its characterization.

23.5.6 **Effects on Aboriginal Rights of the Métis**

23.5.6.1 *Impact to the Exercise of Fishing Rights*

As indicated in Chapter 22 (Current Use of Lands and Resources for Traditional Purposes), review of publically available secondary source materials, and consultation efforts with MNBC did not identify Métis fishing, hunting, gathering, or traditional sites within the LSA.

Impacts on fishing rights as a result of residual effects will be accommodated through the implementation of mitigation measures described elsewhere in the Application. A number of Environmental Management Plans will also be undertaken to accommodate impacts on rights, including a Site Water Management Plan (Section 24.13) and a Fish and Aquatic Effects Management Plan (Section 24.6).

While no specific hunting or trapping areas currently used affected by the Project footprint have been identified by the MNBC, historical traditional harvesting for sustenance purposes is reported by the MNBC in the area south of Vavenby and northwest of the town of Barriere (MNBC 2014). During the review of the draft AIR, the MNBC expressed general concerns related to effects of the Project on wildlife, and on the wildlife VCs selected for assessment. No concerns regarding potential impacts on their ability to access hunting areas in the current Aboriginal use LSA were raised.

Impacts on hunting and rights as a result of residual effects will be accommodated for through the implementation of mitigation measures described elsewhere in the Application/EIS. A number of Environmental Management will also be undertaken to accommodate impacts on rights, including a Wildlife Management Plan (Section 24.19), a Traffic and Access Management Plan (Section 24.16) and a Noise Management Plan (Section 24.10).

Historical traditional harvesting for sustenance purposes is reported by the MNBC in the area south of Vavenby and northwest of the town of Barriere (MNBC 2014). MNBC have not raised specific concerns related to their ability to access currently used gathering areas. One concern related to potential effects of the Project on forestry and natural habitat was raised ([Appendix 3-F](#)).

Impacts on gathering rights as a result of residual effects will be accommodated for through the implementation of mitigation measures described elsewhere in the Application. A number of Environmental Management and Monitoring Plans will also be undertaken to accommodate impacts on rights, including a Vegetation Management Plan (Section 24.17) and Air Quality Management Plan (Section 24.2). HCMC will continue to consult with MNBC. The MNBC have not raised concerns related to potential impacts of the Project on their citizens' current use of habitations, trails, cultural or spiritual sites in the Project area, although historical regional use of trails in the area by the MNBC has been identified.

The characterization of impact to Métis Aboriginal rights is as follows:

- **geographic extent** of any potential effects on fishing, hunting, gathering or traditional sites is *local*;
- **magnitude** is *low* since impacts are restricted to specific species (e.g., moose, Bull Trout);
- **frequency** of the impact on fishing, hunting, gathering and cultural use rights is predicted to be *continuous* during all phases of the Project;
- **duration** of the impact on fishing, hunting, gathering and cultural use rights will largely end once Closure and Reclamation activities commence and offsetting/compensatory plans are effective; therefore, the effect is considered to be *long-term*;
- **reversibility** of the impact is expected to be *reversible* once Closure and Reclamation activities commence;
- **resiliency** or context of the impact is low because specific fishing, hunting, gathering and traditional sites near the Project Site or in the Harper Creek area have not been identified by the MNBC. Assessment of Overall Impact on the Exercise of Métis Aboriginal Rights.

Given the above analysis and that HCMC has committed to implementing a range of mitigation measures, residual effects of the Project are predicted to have an overall **negligible** level of impact to Métis rights. The Project is not expected to affect the ability of present and future generations to exercise their rights, or modify their customs and practices related to fishing, hunting, gathering, or cultural uses. There is a medium likelihood of the impact occurring, with a medium confidence in its characterization.

23.6 CONSIDERATION OF OTHER ABORIGINAL INTERESTS, ISSUES AND CONCERNS RAISED DURING THE ENVIRONMENTAL ASSESSMENT PROCESS

This section of the Application/EIS identifies broader concerns and interests raised by Aboriginal groups during the pre-Application stage of the EA process. All issues raised by Aboriginal groups, and Proponent responses to those issues, are summarized in [Appendix 3-F](#). This section provides further elaboration and characterization of issues raised with respect to effects to Aboriginal peoples.

Based on the issues identified in [Appendix 3-F](#), key concerns raised include:

- employment and training opportunities, and barriers to such (e.g., community capacities and skills levels);
- impacts to community socio-economic development;
- concern regarding impacts of the mine operation on culture, health and social well-being;
- socio-economic and cultural effects; and
- job and income stability for community members employed with the Project.

23.6.1 Potential Effects to Human Health

The assessment of effects to human health (Chapter 21) concludes the following:

- During Construction and Operation, residual effects on human health from changes in air quality are predicted in the air quality RSA (Section 9.5.3) due to increases in PM₁₀. These effects are predicted to be of negligible magnitude, regular frequency, and local in extent, with a moderate likelihood. Air quality will be mitigated by the Air Quality Management Plan (Section 24.2). With the implementation of mitigation measures, residual changes to air quality are expected to have a **not significant (minor)** impact to human health.
- During Construction and Operation, residual effects on human health from changes in noise levels are predicted at nearby operating agricultural and recreational areas. No residential areas are located close to the mine, though traditional and recreational land use may occur. These effects are predicted to be of negligible magnitude, medium-term in duration, regular to continuous in frequency and local in extent, with a low likelihood. Noise levels will be mitigated through the Noise Management Plan (Section 24.10). With the implementation of mitigation measures, residual changes to noise levels are expected to have a **not significant (minor)** impact to human health.
- During the Closure phase, residual effects on human health from changes in drinking water quality are predicted only at T Creek due to increases in selenium. These effects are predicted

to be of negligible magnitude, medium-term in duration, regular frequency, and local in extent, and reversible, with a low likelihood. Mitigation measures include the diversion, collection, and storage/settlement structures to manage water, and treatment of water before discharge. With the implementation of mitigation measures, residual changes to drinking water quality are expected to have a **not significant (minor)** impact to human health. No residual effects to human health due to drinking water quality are predicted during the Construction and Operations phases, based on the outputs of the water quality model.

- During the Construction, Operation, Closure and Post-closure phases of the Project, residual effects on human health from changes in country foods quality are predicted. These effects are predicted to be low in magnitude, long-term in duration, sporadic, local to regional in extent, and partially reversible, with a low likelihood. With the implementation of mitigation measures, residual changes to country foods quality are expected to have a **not significant (minor)** impact to human health.

23.6.2 Potential Socio-economic and Cultural Impacts on First Nations Communities

23.6.2.1 *Effects on Economic Well-being*

A number of potential Project effects on economic well-being are positive including: increased employment for First Nations communities; increased income levels in First Nations communities and among Aboriginal people; increased business activity and income for First Nations businesses; and increased business capacity and investment. As these effects are positive in nature they are outlined and discussed in Section 1.9 (Project Benefits). The potential adverse effects on First Nations economic well-being are discussed below.

First Nations Employment and Income

At Closure, an adverse residual economic effect is anticipated as most Project-related income from jobs, contracts and business opportunities come to an end. There will continue to be beneficial employment effects but there will be a loss of total direct employment. Decommissioning, reclamation, and ongoing operation/maintenance activities during Closure and Post-closure will provide employment opportunities, although these specific workforce requirements have yet to be determined. Many of the skills gained at the mine are transferrable and will have benefits beyond the life of the mine, enabling First Nations workers to apply at other mines or similar resource development or heavy industrial projects in the region.

First Nations Business Capacity and Investment

Highly-qualified First Nations workers are expected to continue to be in high demand, resulting in competition among potential employers with the likelihood that the Harper Creek Project and other projects will attract some workers away from their current jobs. This is predicted to make it more difficult for Aboriginal businesses to find workers with the necessary skills, and potentially lead to wage inflation.

Although there is expected to be a shortage of skilled workers that will put pressure on the market for labour in the short run, in the long run it is expected that the market will adjust. The impacts on

individual businesses are expected to be highly variable, depending on the extent to which the respective labour markets overlap (i.e., in terms of the economic structure of the communities in question, labour force skill sets, labour force experience, geography, and wage levels). Such pressures on individual businesses due to competition in the labour market is a natural and, in the long term, desirable feature of economic development.

Mitigation Measures

Relative to increased competition for skilled labour and wage inflation, are the following mitigation measures:

- Preparation and implementation of a local hiring and training policy – along with the Applicant’s labour requirements, broken out by trade/competency, and minimum educational qualifications – prior to commencement of construction.
- Work with local Aboriginal communities, Districts of Clearwater and Barriere on the development of a recruitment plan.
- Participate with different levels of government and other major employers in the monitoring of labour shortages in the North Thompson through a mechanism to be set up jointly for that purpose.
- Participate with affected communities (including First Nations) and government agencies, in preparing an adjustment strategy in readiness for mine closure.

Provided that the potential projects listed in Section 17.6 (Cumulative Effects) eventuate, these will contribute to alternative employment opportunities. These opportunities, combined with a strategy implemented by HCMC to address the employment effects of mine closure, should result in no residual effects due to loss of employment at Closure.

23.6.2.2 *Effects on Social Well-being*

Direct, indirect, and induced employment and Project expenditures on goods and services are expected to produce intermediate effects, which in turn may have an adverse effect on the social well-being of First Nations communities. The intermediate effects include the potential migration of people to, or back to, the First Nations communities in response to economic opportunities during the Construction and Operation phases of the Project, as well as an increase in disposable income levels in the communities which can lead to a range of social issues.

Housing

The Project will potentially cause an increase in demand for dwellings from incoming Project workers, their families and others who perceive opportunities for indirect or induced employment as a result of Project activity. However, this effect is anticipated to occur in communities situated along Highway #5 from Vavenby to Barriere, with the majority of house purchases taking place in Clearwater. It is anticipated that most of the First Nations people employed by the Project will reside in communities closer to the Project, except perhaps those living at Chu Chua.

Community Services

Since there is no notable influx anticipated into First Nations communities, there is little likelihood that community infrastructure or services in the communities would face an increase in demand or use. More strain, however, might be placed on services in more regional hubs, such as hospitals, ambulance and policing services. As seen in other communities, the effect of increased income can trigger increases in the use of alcohol and illicit drugs, and gambling activity which in turn can result in adverse effects on family relationships resulting in increased demands for counselling services (such as mental health and addiction services). Any increase in demand for mental health or addictions services may place stress on the services available.

Pressure on social services may also spike during closure and decommissioning when individuals and families have to adjust to loss of employment, possibly leaving the community and other changes. Participatory planning in advance of closure with relevant levels of government, HCMC and First Nations communities will help workers make smooth transitions.

Community Well-being

Research and experience from other jurisdictions suggest that higher incomes associated with Project employment and the rotational work schedule can lead to potential adverse indirect effects to lifestyle choices. Disposable income, and long periods of down time, can increase incidences of drug and alcohol misuse, gambling, and transmission of sexually transmitted infections among workers (Storey 2010). Also, higher income levels without the experience or knowledge on money management can lead to poor choices on how to spend additional income. Increased work-related stress can also result in a potential increase in substance misuse and other negative social behaviors (Gibson G. 2005).

During consultations, community members and leaders recognized that potential employment at the mine could stress some families and result in an increased number of family breakups and or cases of physical abuse. As such, there is the potential for changes in the quality of health and social aspects of community and family life in First Nations communities. An example might be an increase in spousal abuse and domestic violence in households experiencing increased disposable income related to Project employment. This effect, if realized would occur primarily during the operations phase when the largest number of workers would be engaged in Project related employment.

HCMC has decided on an operating shift rotation of four days on and four days off, with 12-hour shifts, and commuting between the Project and local communities. Family stresses associated with absences are anticipated to occur far less than if the mine was remote and required a fly-in/fly-out shift rotation.

Employment opportunities were also considered to be important to the overall well-being of the community. As such, increased income and job prospects can improve a family's lifestyle with more money for food, better accommodation, holidays and generally a better quality of life. Additionally, families may be re-united as workers move back to the community and find work with the Project.

In sum, the development of the Project is expected to have an impact on community well-being. The extent of the effect will be determined by the number of First Nations community members that

obtain employment with the Project. Even then, should many First Nations people obtain Project employment, changes to family and community well-being will be based on how individuals respond to increased incomes and Project work rotation schedules. In many respects, positive outcomes as a result of increased income and employment are more likely than negative outcomes.

Mitigation Measures

HCMC has committed to implement the following mitigation and management measures to minimize effects to social well-being:

- The company has incorporated into its Project design first aid facilities, health and safety policies and provision for an employee health and wellness benefits program.
- HCMC will have policies related to health and safety and these policies will be communicated to each employee and contract employee during an employee orientation.
- HCMC will work with Interior Health Authority's responsible authority at Dr. Helmcken Hospital in Clearwater, and other relevant health and social service providers to establish and maintain effective communications for all phase of the mine life, including communicating relevant details about its health and safety and emergency plans.
- HCMC will, as part of its orientation and site safety training provide personnel operating Company vehicles with traffic safety instruction, which will include protocols to be observed when encountering school buses. HCMC will also implement a Traffic and Access Management Plan (Section 24.16)

23.6.2.3 *Effects on Cultural Well-being*

Participation in Cultural Activities and Practices

The cultural effects related to shift work and increased income may be either positive or negative and depend on the number of First Nations people that obtain mine employment, their ability to balance their current cultural activities and obligations, and the availability of family and community support.

Mining work schedules reduce the amount of time people are able to dedicate to hunting, fishing or the gathering of plant and berries. In one study 71% of Aboriginal workers reported spending less time out on the land (Gibson and Klinck 2005). First Nations employees working shift rotations may have less opportunity to participate in a range of cultural activities and practices.

Similarly, mine work schedules may be prohibitive to First Nations cultural commitments, such as attendance at funerals. Other cultural ceremonies and events are planned well in advance, giving employees and employers opportunity to plan around such events.

Traditional land and resource use may even be enhanced by mine development to the extent that increased incomes associated with mining employment would enable individuals to purchase needed equipment and supplies (e.g., boats, motors, firearms, fuel, ammunition, traps, fishing gear, all-terrain vehicles) and thereby increase their opportunities to engage in resource harvesting activities.

23.7 SUMMARY OF EFFECTS ON ABORIGINAL RIGHTS AND RELATED INTERESTS

As per the relevant directives in the *Canadian Environmental Assessment Act* (1992) and the AIR, HCMC has assessed the potential effects on the Aboriginal rights and interests of SFN, the Shuswap Lakes Division (represented by the ALIB, NIB, LSIB), and MNBC in relation to Project activities. Drawing on the individual effects assessments in the biophysical, socio-economic and human health, and current use of lands and resources for traditional purposes in other chapters, this chapter has identified and characterized the potential interactions between VCs and Aboriginal interests and rights. Further, the chapter has summarized the potential effects, and their significance ratings, on those identified Aboriginal rights and interests and provided cross-referencing to other sections of the Application wherever applicable.

In particular, the chapter summarized the baseline setting for each Aboriginal group, as well as the consultation that has occurred – and is planned to occur – with each group, as well as the status of TK integration in the EA. The chapter characterized Aboriginal rights and the issues, interests and concerns of Aboriginal groups relative to Aboriginal rights. It then assessed impacts of the Project on the exercise of Aboriginal rights. Following mitigation, the assessment found the potential effects on Aboriginal rights to be minor to negligible. A summary of potential adverse effects relating to other Aboriginal interests was provided.

HCMC will continue with the implementation of its Aboriginal Consultation Plans throughout the remainder of the pre-Application stage, and during the Application/EIS review stage. HCMC is also committed to resolving any outstanding issues with First Nations during the Application review stage.

Table 23.7-1 summarizes the potential effects of the Project on the Aboriginal rights and measures to mitigate potential impacts.

Table 23.7-1. Summary of Potential Effects on Aboriginal Groups Rights and Accommodation Measures

Residual Effect	Rights Potentially Affected	Mitigation/Accommodation Measures	Impact on Aboriginal Right
Change in abundance and distribution - Fish (Bull Trout) as a result of changes in surface water quantity and country foods quality)	Fishing	Diverting non-contact and contact water; maintaining natural networks; reusing contact water to minimize the use of freshwater. Implementing the Fish Habitat Offsetting Plan (Appendix 14-E); surface water management structures (diversion channels). Implementing the Fish and Aquatic Effects Monitoring and Management Plan (Section 24.6); Site Water Management Plan (Section 24.13); Sediment and Erosion Control Plan (Section 24.11).	Simp cw (minor) Lakes Division (minor) MNBC (negligible)
Change in abundance and distribution of wildlife resources (moose) as a result of habitat alteration	Hunting and trapping	Wildlife Management Plan (Section 24.19); Noise Management Plan (Section 24.10); Spill Prevention and Response Plan (Section 24.15); Air Quality Management Plan (Section 24.2); Vegetation Management Plan (Section 24.17); Prohibition of hunting by staff within Project Site, Closure and Reclamation Plan (Chapter 7).	Simp cw (negligible) Lakes Division (negligible) MNBC (negligible)
Change in access to gathering resources as a result of habitat loss	Gathering	Discourage hunting, fishing, or berry collecting at the Project Site; Vegetation Management Plan (Section 24.17); Air Quality Management Plan (Section 24.2); Spill Prevention and Response Plan (Section 24.15); Fuel Handling Plan (Section 24.7); Mine Waste and ML/ARD Management Plan (Section 24.9); Sediment Erosion and Control Plan (Section 24.11).	Simp cw (minor) Lakes Division (negligible) MNBC (negligible)
Change in access or ability to use traditional sites (rock cairns) Change in quality and experience of the natural environment in the Harp Mountain area due to visual quality	Cultural Use	Mitigation measures will be developed in consultation with local First Nations and the BC Archaeology Branch. Noise Management Plan (Section 24.10); Visual design principles, Closure and Reclamation Plan (Chapter 7).	Simp cw (minor to moderate) Lakes Division (negligible) MNBC (negligible)
See above	Overall impact on Rights	See above	Simp cw (minor) Lakes Division (negligible) MNBC (negligible)

REFERENCES

1982. *The Constitution Act, 1982, Schedule B to the Canada Act 1982 (UK)*, C. 11.
1992. *Canadian Environmental Assessment Act*, SC 1992. C. 37.
2002. *Environmental Assessment Act*, RSBC. C. 43.
- Delgamuukw v. British Columbia. 1997. 3 SCR 1010.
- Haida Nation v. British Columbia (Minister of Forests), 2004a SCC 3 SCR 511.
- Mikisew Cree First Nation v. Canada (Minister of Canadian Heritage), 2005 SCC 3 SCR 388.
- R. v. Powley. 2003. 2 SCR 207, 2003 SCC 43.
- R. v. Van der Peet. 1996. 2 SCR 507.
- Taku River Tlingit First Nation v. British Columbia (Project Assessment Director), 2004b SCC 3 SCR 550.
- Tsilhqot'in Nation v. British Columbia. 2014. SCC 44.
- AANDC. 2011. *Aboriginal Consultation and Accommodation: Updated Guidelines for Federal Officials to Fulfill the Duty to Consult*. http://www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ/STAGING/texte-text/intgui_1100100014665_eng.pdf (accessed January 2014).
- AANDC. n.d. *First Nations Community Profiles*. <http://fnpim-cippn.aandc-aadnc.gc.ca/index-eng.asp> (accessed June 2014).
- Aboriginal Canada Portal. 2011. *Web Site*. Government of Canada. <http://www.aboriginalcanada.gc.ca/acp/sitensf/eng/index.html> (accessed June 2011).
- BC EAO. 2010. *Proponent Guide for providing First Nation Consultation Information – Non-Treaty First Nations*. Victoria, BC.
- Billy, J. R. 2006. Cultural Survival and Environmental Degradation in the Mountains of the Secwepemc. In *Amenity Migrants: Seeking and Sustaining Mountains and Their Cultures*. Ed. L. A. G. Moss. 148-62. CABI Publishing.
- Boas, F. 1890. *The Shuswap*. Part IV of the Sixteenth Report of the British Association for the Advancement of Science, Leeds.
- Bouchard, R. and D. Kennedy, eds. 1979. *The British Columbia Indian Language Project*. Vancouver, BC: CommCept Publishing Ltd.
- CEA Agency. 1994. *A Reference Guide for the Canadian Environmental Assessment Act: Determining Whether a Project Is Likely to Cause Significant Adverse Effects*. http://www.ceaa-acee.gc.ca/Content/D/2/1/D213D286-2512-47F4-B9C3-08B5C01E5005/Determining_Whether_a_Project_is_Likely_to_Cause_Significant_Adverse_Environmental_Effects.pdf (accessed February 2014).
- CEA Agency. 2010. *Considering Aboriginal Traditional Knowledge in Environmental Assessments Conducted under the Canadian Environmental Assessment Act - Interim Principles*. <https://www.ceaa-acee.gc.ca/default.asp?lang=En&n=4A795E76-1> (accessed November 2013).

- Dawson, G. M. 1892. *Notes on the Shuswap People of British Columbia*. Transactions of the Royal Society of Canada, Section II: 2-34.
- DFO. 2008. *Comprehensive Fisheries Agreement*. <http://www.dfo-mpo.gc.ca/Library/333626%20CFA%2008-1772.pdf> (accessed October 2014).
- FPHLCC. n.d. *Secwepemctsin*. <http://maps.fphlcc.ca/secwepemctsin> (accessed June 2014).
- Gibson, G. and J. Klinck. 2005. Canada's Resilient North: The Impact of Mining on Aboriginal Communities. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health*, 3 (1): pp. 115-37.
- Gibson G., a. K., J. 2005. *Unearthing and Communication Health Implications*. http://www.impactandbenefit.com/UserFiles/Servers/Server_625664/File/IBA%20PDF/Health/Mining%20and%20Health%20-%20Complete%20Proposal.pdf (accessed November 2013).
- Ignace, M. and R. Ignace. 2004. The Secwepmc: Traditional Resource Use and Rights to Land. In *Native Peoples: The Canadian Experience*. Edited by R. B. Morrison and C. R. Wilson. Oxford and Toronto: Oxford University Press. 3rd Edition.
- Ignace, R. E. 2008. *Our Oral Histories are our Iron Posts: Secwepmc Stories and Historical Consciousness*. Simon Fraser University, Ph.D. Dissertation.
- Indian Claims Commission. 2008. *Neskonlith, Adams Lake, and Little Shuswap Indian Bands: Neskonlith Douglas Reserve Inquiry*. Ottawa, ON.
- Kuipers, A. H. 1974. The Shuswap Language: Grammar, Texts, Dictionary. *Janua Linguarum, Series Practica* 225. The Hague: Mouton.
- Laurie McNeil & Associates. 2012. *Socio-Economic Assessment Report- Simpcw First Nation*. Prepared for Yellowhead Mining Inc. by Laurie McNeil & Associates.
- LSIB. n.d. *Little Shuswap Indian Band- Website*. <http://www.LSIB.com/home> (accessed June 2014).
- MNBC. 2010. *Website*. [http://www.bcuc.com/Documents/Proceedings/2010/DOC 25662 C9-3-MNBC-response-IR-BCUC.pdf](http://www.bcuc.com/Documents/Proceedings/2010/DOC%2025662%20C9-3-MNBC-response-IR-BCUC.pdf) (accessed January 2014).
- MNBC. 2014. *Website*. <http://www.mnbc.ca/> (accessed January 2014).
- Neskonlith. 2013. *Neskonlith Indian Band- Socio-economic Baseline Report [Update]*. Prepared for Yellowhead Mining Inc. by Neskonlith Indian Band: Neskonlith, BC.
- Neskonlith. n.d. *Website*. <http://neskonlith.org/> (accessed June 2014).
- Palmer, G. B. 1975a. Cultural Ecology of the Canadian Plateau. Pre-contact to the Early Contact Period in the Territory of the Southern Shuswap Indians of British Columbia. In *Northwest Anthropological Research Notes*, 9 (2): 199-245.
- Palmer, G. B. 1975b. Suswap Indian Ethnobotany. In *Syesis* 8: 23-81. Victoria, BC: British Columbia Provincial Museum.
- Ray, V. F. 1939. *Cultural Relations in the Plateau of Western America*. Publications of the Frederick Webb Hodge Anniversary Publication Fund, Vol. 111. Los Angeles, CA: The Southwestern Museum.

SCES. 2007. *Secwepemc Cultural Education Society*- Website. <http://www.secwepemc.org/> (accessed June 2014).

Secwepemc Cultural Education Society. 2007. *Shuswap Declaration: To Work in Unity on Shuswap Language, History, and Culture*. <http://www.secwepemc.org/node/61> (accessed July 2011).

Secwepemc Nation. n.d. *The Land of the Sewepemc*. <http://www.landoftheshuswap.com/index.html> (accessed July 2014).

SFN. n.d. *Simpcw First Nation Fisheries*. <http://simpcw.com/services/simpcw-fisheries> (accessed August 2014).

SNTC. 2009. *Aboriginal Skills Employment & Training Services*. <http://www.shuswapnation.org/departments/skills-training.html> (accessed July 2011).

Statistics Canada. 2013. *NHS Profile, 2011*. <http://www12.statcan.ca/nhs-enm/2011/dp-pd/prof/index.cfm?Lang=E> (accessed June 2014).

Storey. 2010. *Fly-in/Fly-out: Implications for Community Sustainability*.

Teillet, J. 2006. *Metis Law Summary 2006*. <http://www.pstlaw.ca/resources/MLS-2006.pdf> (accessed February 2014).

Teit, J. A. 1909. 1909. The Shuswap. In *Memoirs of the American Museum of Natural History*, Reprint from Vol. 2, Part7 of the Jesup North Pacific Expedition. New York: G.R. Stechert & Co.

Thomson, D. and M. Ignace. 2005. They Made Themselves our Guests: Power Relationships in the Interior Plateau Region of the Cordillera in the Fur Trade Era. In *BC Studies*, Vol. Fall 2005.

Thompson Rivers University Regional Centre. 2011. *Clearwater*. http://www.tru.ca/regional_centres/clearwater.html (accessed October 2014).

Personal Communications

Adamson, S. 2012. Email regarding band information, July 16, 2012.